


**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐

<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> Dart 4-14-3-2WH				
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> WILDCAT				
<b>4. TYPE OF WELL</b> Oil Well      Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>				
<b>6. NAME OF OPERATOR</b> NEWFIELD PRODUCTION COMPANY						<b>7. OPERATOR PHONE</b> 435 646-4825				
<b>8. ADDRESS OF OPERATOR</b> Rt 3 Box 3630 , Myton, UT, 84052						<b>9. OPERATOR E-MAIL</b> mcrozier@newfield.com				
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> Patented			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>				
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b> Dart Homestead Ranch, Inc.						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b> 435-722-7087				
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b> Route 2, Box 2044, Roosevelt, UT 84066						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>				
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input checked="" type="checkbox"/>				
<b>20. LOCATION OF WELL</b>		<b>FOOTAGES</b>		<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>		
LOCATION AT SURFACE		250 FNL 201 FWL		NWNW	14	3.0 S	2.0 W	U		
Top of Uppermost Producing Zone		660 FNL 660 FWL		NWNW	14	3.0 S	2.0 W	U		
At Total Depth		660 FSL 660 FWL		SWSW	14	3.0 S	2.0 W	U		
<b>21. COUNTY</b> DUCHESNE			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 201			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 40				
			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 3090			<b>26. PROPOSED DEPTH</b> MD: 13332 TVD: 8765				
<b>27. ELEVATION - GROUND LEVEL</b> 5418			<b>28. BOND NUMBER</b> B001834			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 437478				
<b>Hole, Casing, and Cement Information</b>										
<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Length</b>	<b>Weight</b>	<b>Grade &amp; Thread</b>	<b>Max Mud Wt.</b>	<b>Cement</b>	<b>Sacks</b>	<b>Yield</b>	<b>Weight</b>
Cond	17.5	14	0 - 60	37.0	H-40 ST&C	0.0	Hi Lift "G"	35	1.17	15.8
Surf	12.25	9.625	0 - 2500	36.0	J-55 LT&C	8.3	Type III	216	3.33	11.0
							Type III	95	1.9	13.0
I1	8.75	7	0 - 9348	29.0	P-110 Other	11.5	35/65 Poz	277	2.59	11.5
							50/50 Poz	287	1.62	13.0
Prod	6.125	4.5	8416 - 13332	13.5	P-110 Other	11.5	No Used	0	0.0	0.0
							No Used	0	0.0	0.0
<b>ATTACHMENTS</b>										
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
<b>NAME</b> Don Hamilton				<b>TITLE</b> Permitting Agent			<b>PHONE</b> 435 719-2018			
<b>SIGNATURE</b>				<b>DATE</b> 05/02/2013			<b>EMAIL</b> starpoint@etv.net			
<b>API NUMBER ASSIGNED</b> 43013521720000				<b>APPROVAL</b>  Permit Manager						

RECEIVED: June 13, 2013

**Newfield Production Company****4-14-3-2****Surface Hole Location: 250' FNL, 201' FWL, Section 14, T3S, R2W****Bottom Hole Location: 660' FSL, 660' FWL, Section 14, T3S, R2W****Duchesne County, UT****Drilling Program****1. Formation Tops**

Uinta	surface
Green River	3,827'
Garden Gulch member	6,657'
Uteland Butte	8,905'
Lateral TD	8,765' TVD / 13,332' MD

**2. Depth to Oil, Gas, Water, or Minerals**

Base of moderately saline	1,530'	(water)
Green River	6,657' - 8,765'	(oil)

**3. Pressure Control**

<u>Section</u>	<u>BOP Description</u>
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Surface	12-1/4" diverter
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Interm/Prod	The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 5M system.
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A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 psi will be used.

**4. Casing**

Description	Interval		Weight (ppf)	Grade	Coupl	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom (TVD/MD)							Burst	Collapse	Tension
Conductor 14	0'	60'	37	H-40	Weld	--	--	--	--	--	--
Surface 9 5/8	0'	2,500'	36	J-55	LTC	8.33	8.33	12	3,520	2,020	453,000
Intermediate 7	0'	8,958' 9,348'	29	P-110	BTC	11	11.5	15	11,220	8,510	929,000
Production 4 1/2	8,416'	8,765' 13,332'	13.5	P-110	BTC	11	11.5	--	12,410	10,670	422,000
									3.00	2.44	6.36

Assumptions:

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)

Intermediate casing MASP = (reservoir pressure) - (gas gradient)

Production casing MASP = (reservoir pressure) - (gas gradient)

All collapse calculations assume fully evacuated casing with a gas gradient

All tension calculations assume air weight of casing

Gas gradient = 0.1 psi/ft

All casing shall be new.

All casing strings shall have a minimum of 1 centralizer on each of the bottom 3 joints.

## 5. Cement

Job	Hole Size	Fill	Slurry Description	ft <sup>3</sup>	OH excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
				sacks			
Conductor	17 1/2	60'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	41	15%	15.8	1.17
				35			
Surface Lead	12 1/4	2,000'	Type III + .125 lbs/sk Cello Flakes	720	15%	11.0	3.33
				216			
Surface Tail	12 1/4	500'	Type III + .125 lbs/sk Cello Flakes	180	15%	13.0	1.9
				95			
Intermediate Lead	8 3/4	4,157'	Premium - 65% Class G / 35% Poz + 10% Bentonite	719	15%	11.5	2.59
				277			
Intermediate Tail	8 3/4	2,691'	50/50 Poz/Class G + 1% bentonite	465	15%	13.0	1.62
				287			
Production	6 1/8	--	Liner will not be cemented. It will be isolated with a liner top packer.	--	--	--	--
				--			

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

Actual cement volumes for the intermediate casing string will be calculated from an open hole caliper log, plus 15% excess.

The cement slurries will be adjusted for hole conditions and blend test results.

The production liner will be left uncemented. Individual frac stages will be isolated with open hole packers. A liner top hanger and packer will be installed 50' above KOP.

## 6. Type and Characteristics of Proposed Circulating Medium

### Interval                      Description

Surface - 2,500'

An air and/or fresh water system will be utilized. If an air rig is used, the blooie line discharge may be less than 100' from the wellbore in order to minimize location size. The blooie line is not equipped with an automatic igniter. The air compressor may be located less than 100' from the well bore due to the low possibility of combustion with the air/dust mixture. Water will be on location to be used as kill fluid, if necessary.

2,500' - TD

A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and

if conditions warrant, with barite.

-or-

A diesel based OBM system: with an oil to water ratio between 70/30 and 80/20. Emulsifiers and wetting agents will be used to maintain adequate mud properties. A water phase salinity will be maintained in the range of 25% using CaCl (Calcium Chloride).

Anticipated maximum mud weight is 11.5 ppg.

## 7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run in the intermediate section from the top of the curve to the base of the surface casing. A compensated neutron/formation density log will be run in the intermediate section from the top of the curve to the top of the Garden Gulch formation. A cement bond log will be run from the top of the curve to the cement top behind the intermediate casing.

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

## 8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by a 0.57 psi/ft gradient.

$$8,765' \times 0.57 \text{ psi/ft} = 5014 \text{ psi}$$

No abnormal temperature is expected. No H<sub>2</sub>S is expected.

## 9. Other Aspects

An 8-3/4" vertical hole will be drilled to a kick off point of 8,466' .  
Directional tools will then be used to build to 92.90 degrees inclination.  
The 7" intermediate casing string will be set once the well is landed horizontally in the target zone.

The lateral will be drilled to the bottomhole location shown on the plat.  
A liner with a system of open hole packers will be used to provide multi-stage frac isolation in the lateral. The top of the liner will be place 50' above KOP and will be isolated with a liner top packer.

Newfield requests the following variances from Onshore Order #2:

- Variance from Onshoer Order #2, III.E.1

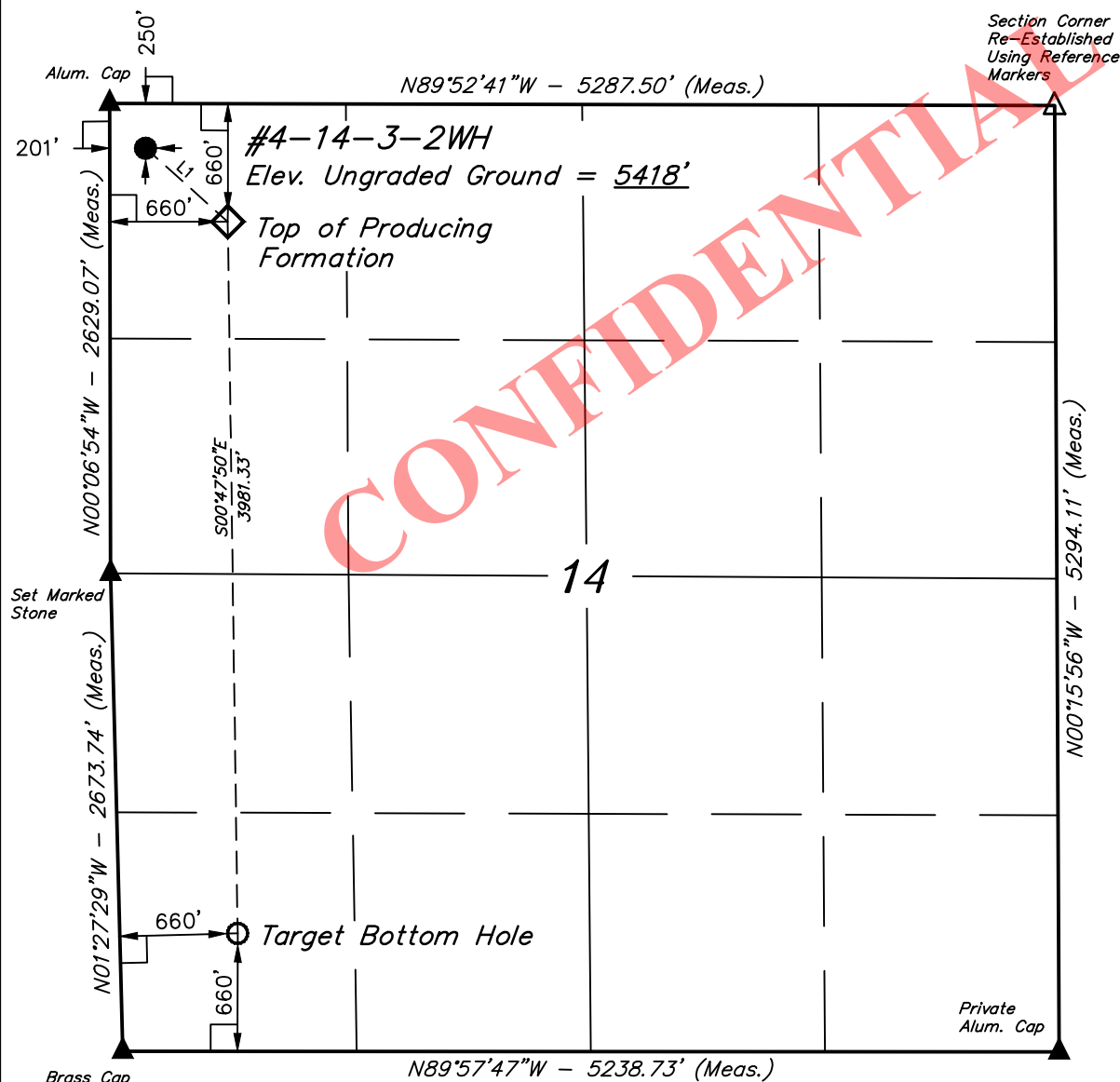
Refer to Newfield Production Company Standard Operating Practices "Ute Tribal Green River Development Program" paragraph 9.0



If oil based mud (OBM) is used, all processed OBM drill cuttings would be removed from the well bore using a closed loop system. OBM cuttings would be dried and centrifuged and then temporarily stored within a lined pit that would be constructed inboard of the pad area. The pit would be lined with 16 mil (minimum) thickness polyethylene nylon reinforced liner material. The liner(s) would overlay straw, dirt and/or bentonite if rock is encountered during excavation. The liner would overlap the pit walls and be covered with dirt and/or rocks to hold them in place. No trash, scrap pipe, or other materials that could puncture the liner would be discarded in the pit, and a minimum of two feet of free board would be maintained between the maximum fluid level and the top of the pit at all times. All OBM cuttings will be mechanically dried and centrifuged so that they can be easily transferred to a lined cuttings pit with little to no free fluid on them. Samples of the mechanically dried OBM cuttings will be taken for chemical analysis. The OBM cuttings will then be mixed with a chemical drying agent and the chemically dried OBM cuttings will be placed in a lined cuttings pit on the generating location that is separated from the water based cuttings. The pit will be of sufficient size to contain all cuttings generated in the drilling process. At this point, the chemically dried OBM cuttings are ready for the Firmus® construction process or the OBM cuttings may also be transported to a state approved disposal facility. If an oil based mud is not used, a conventional reserve pit will be utilized. The pit will be reclaimed using UDOGM and BLM approved procedures.

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T3S, R2W, U.S.B.&amp;M.



NEWFIELD EXPLORATION COMPANY

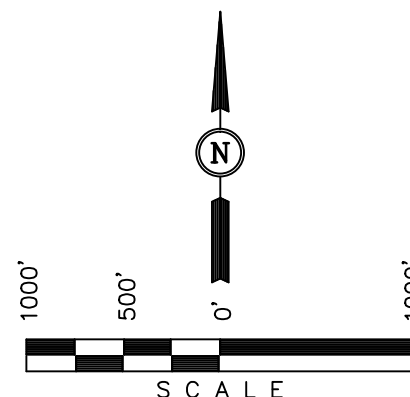
Well location, #4-14-3-2WH, located as shown in the NW 1/4 NW 1/4 of Section 14, T3S, R2W, U.S.B.&M., Duchesne County, Utah.

## BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE NORTHEAST CORNER OF SECTION 20, T3S, R2W, U.S.B.&M. TAKEN FROM THE MYTON, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5148 FEET.

## BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



## CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

## LEGEND:

└─┘ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

△ = SECTION CORNERS  
RE-ESTABLISHED. (Not Set  
on Ground.)

## LINE TABLE

LINE	DIRECTION	LENGTH
L1	S48°12'59"E	616.52'

NAD 83 (TOP OF PRODUCING FORMATION)	NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°13'39.87" (40.227742)	LATITUDE = 40°13'00.54" (40.216817)	LATITUDE = 40°13'43.93" (40.228869)
LONGITUDE = 110°05'02.01" (110.083892)	LONGITUDE = 110°05'01.31" (110.083697)	LONGITUDE = 110°05'07.93" (110.085536)
NAD 27 (TOP OF PRODUCING FORMATION)	NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°13'40.02" (40.227783)	LATITUDE = 40°13'00.69" (40.216858)	LATITUDE = 40°13'44.08" (40.228911)
LONGITUDE = 110°04'59.47" (110.083186)	LONGITUDE = 110°04'58.77" (110.082992)	LONGITUDE = 110°05'05.39" (110.084831)

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 11-12-12	DATE DRAWN: 11-15-12
PARTY M.A. A.H. S.F.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE NEWFIELD EXPLORATION COMPANY	

RECEIVED: May 02, 2013

# NEWFIELD EXPLORATION COMPANY

#4-14-3-2WH

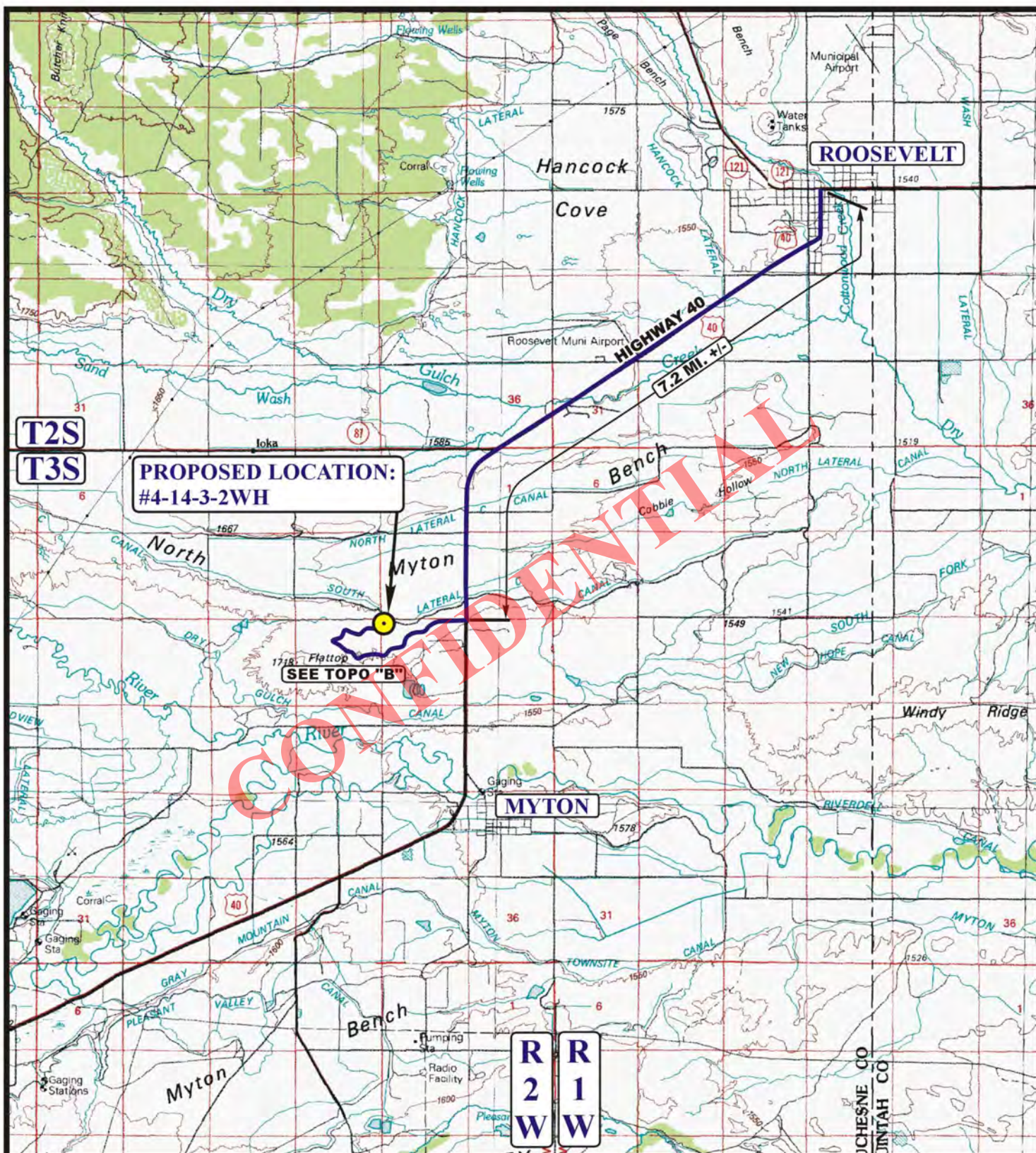
SECTION 14, T3S, R2W, U.S.B.&M.

PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY, THEN SOUTHERLY DIRECTION FROM ROOSEVELT, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 7.2 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #4-15-3-2WH TO THE WEST; FOLLOW ROAD FLAGS IN A WESTERLY, THEN SOUTHWESTERLY, THEN NORTHWESTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 10,732' TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 2,668' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM ROOSEVELT, UTAH TO THE PROPOSED LOCATION IS APPROXIMATELY 9.7 MILES.

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**NEWFIELD EXPLORATION COMPANY**

**#4-14-3-2WH**

**SECTION 14, T3S, R2W, U.S.B.&M.**

**250' FNL 201' FWL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

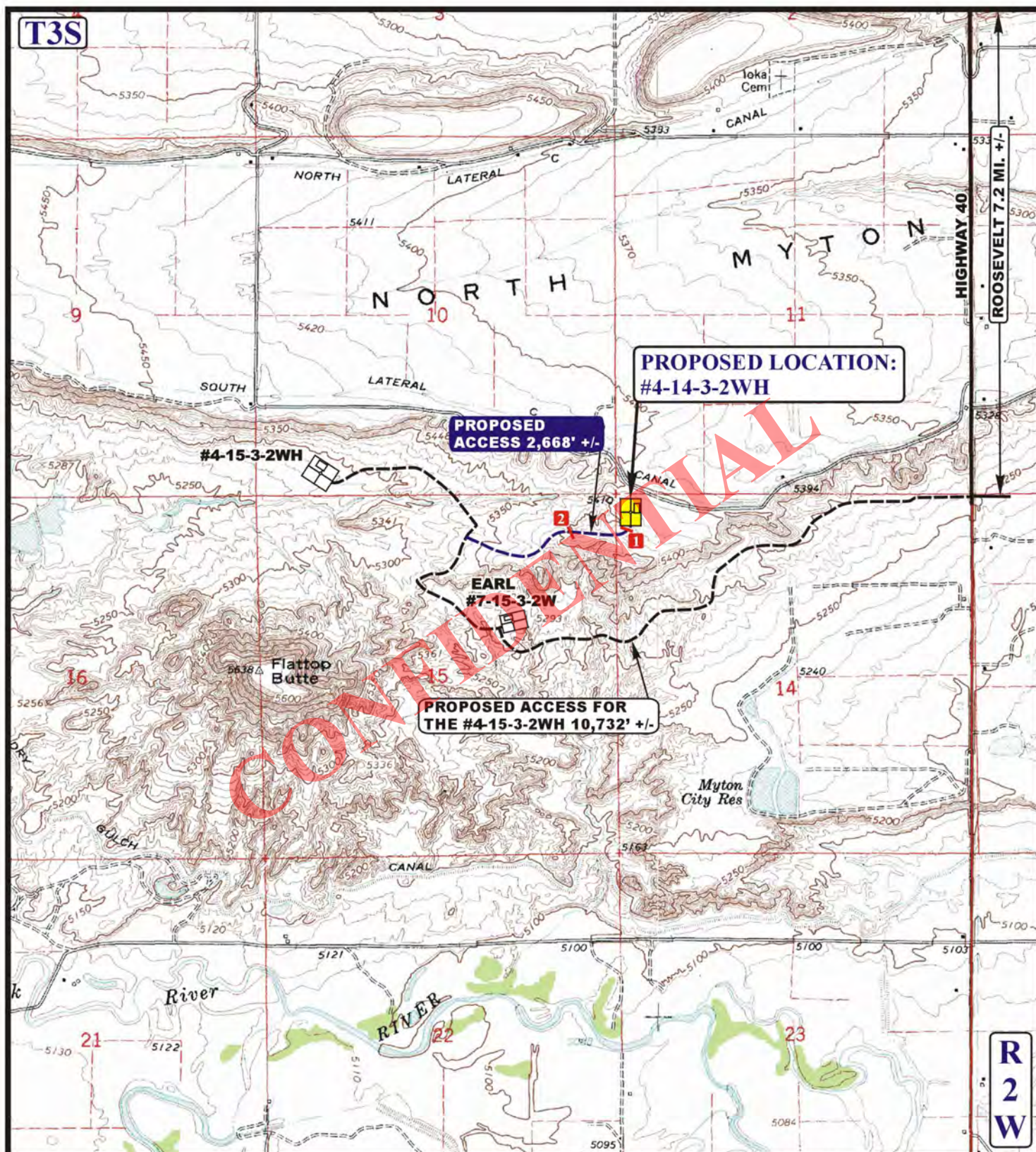
**ACCESS ROAD  
MAP**

**11 20 12**  
MONTH DAY YEAR

**SCALE: 1:100,000 DRAWN BY: C.L. REVISED: 00-00-00**





**LEGEND:**

— EXISTING ROAD  
 - - - PROPOSED ACCESS ROAD

**1** 18" CMP REQUIRED **2** 24" CMP REQUIRED



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**NEWFIELD EXPLORATION COMPANY**

**#4-14-3-2WH**  
**SECTION 14, T3S, R2W, U.S.B.&M.**  
**250' FNL 201' FWL**

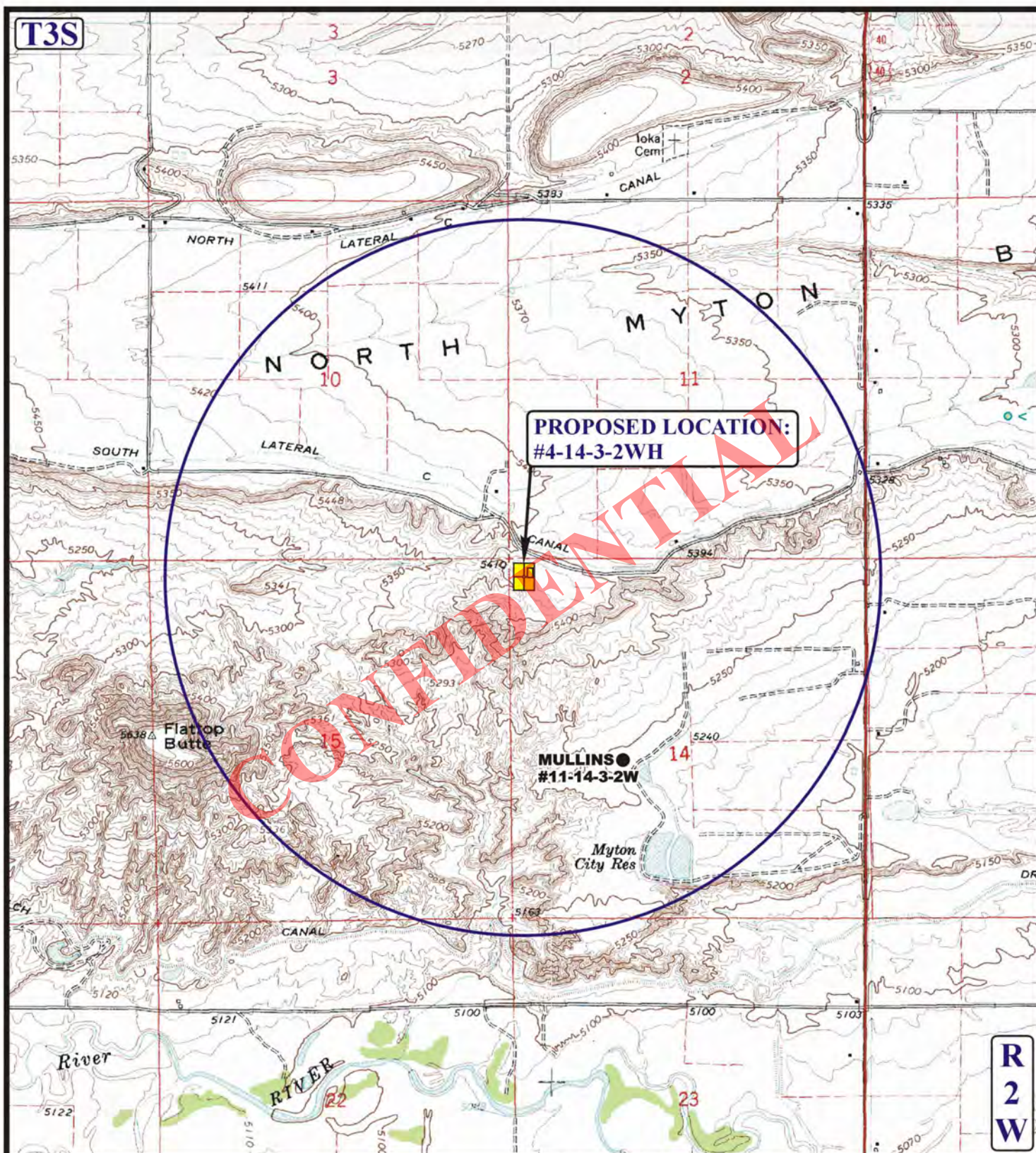
**ACCESS ROAD**  
**MAP**

**11** **20** **12**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.L. REVISED: 00-00-00

**B**  
**TOPO**



**LEGEND:**

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

**NEWFIELD EXPLORATION COMPANY**

#4-14-3-2WH

SECTION 14, T3S, R2W, U.S.B.&amp;M.

250' FNL 201' FWL



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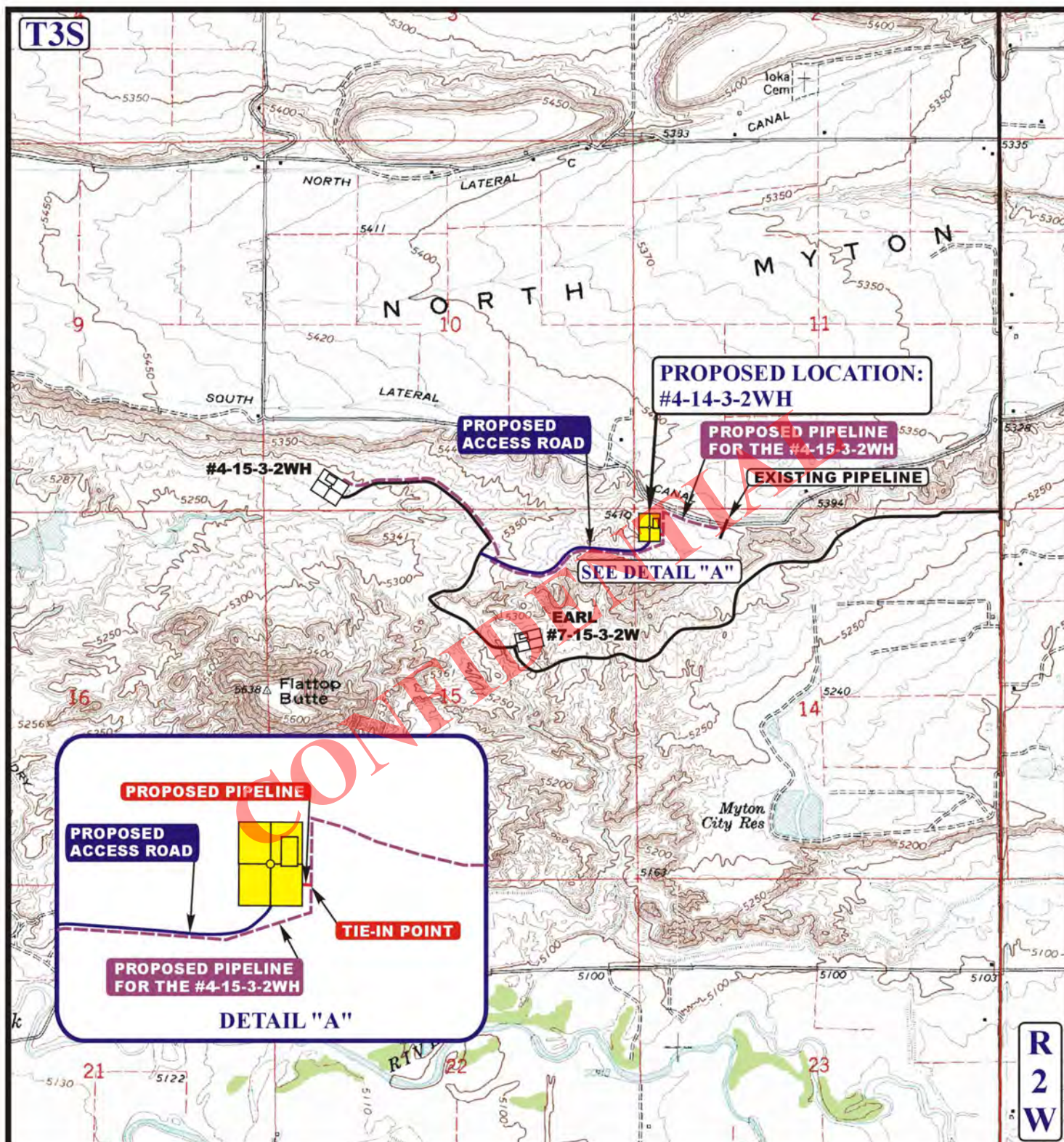
**TOPOGRAPHIC**  
**MAP**

**11** **20** **12**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.L. REVISED: 00-00-00







APPROXIMATE TOTAL PIPELINE DISTANCE = 25' +/-

# LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- - - - PROPOSED PIPELINE
- - - - PROPOSED PIPELINE (SERVICING OTHER WELLS)

# NEWFIELD EXPLORATION COMPANY

#4-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
250' FNL 201' FWL



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
MAP

11 20 12  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.L. REVISED: 00-00-00

D  
TOPO

# Newfield Exploration Company

Duchesne County, UT

Sec. 14-T3S-R2W

4-14-3-2WH

Plan A Rev 0 Permit

Plan: Plan A Rev 0 Proposed Permit Only

## Sperry Drilling Services

### Proposal Report

23 January, 2013

Well Coordinates: 2,211,393.80 N, 620,367.94 E (40° 13' 43.93" N, 110° 05' 07.93" W)

Ground Level: 5,418.00 ft

Local Coordinate Origin:

Centered on Site Sec. 14-T3S-R2W

Viewing Datum:

WELL @ 5436.0ft (Original Well Elev)

TVDs to System:

N

North Reference:

True

Unit System:

API

Geodetic Scale Factor Applied

Version: 5000.1 Build: 61

**HALLIBURTON**

RECEIVED: May 02, 2013

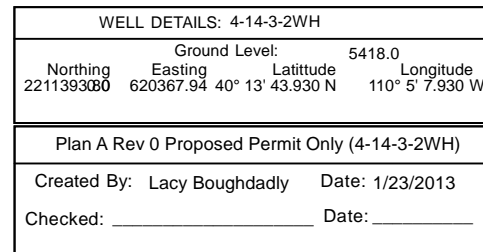
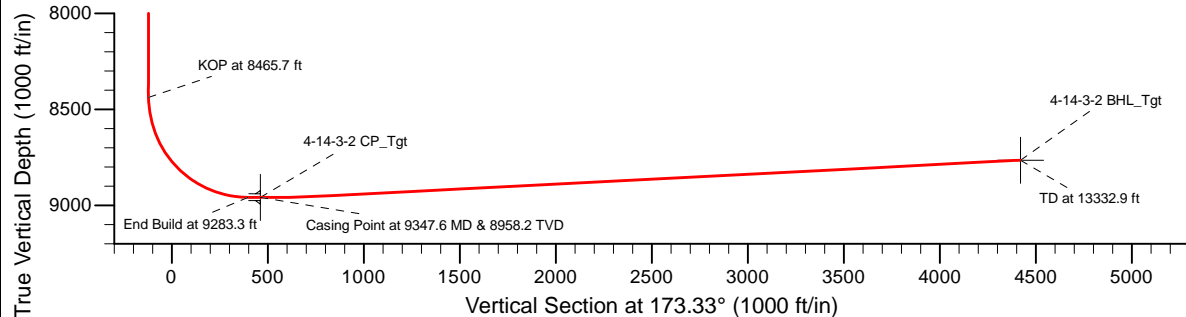


Project: Duchesne County, UT  
Site: Sec. 14-T3S-R2W  
Well: 4-14-3-2WH  
Wellbore: Plan A Rev 0 Permit  
Design: Plan A Rev 0 Proposed

**HALLIBURTON**  
Sperry Drilling

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3466.7	7.00	68.95	3465.5	10.2	26.6	1.50	68.95	-7.1	
4	6966.7	7.00	68.95	6939.4	163.4	424.6	0.00	0.00	-113.0	
5	7433.3	0.00	0.00	7404.9	173.7	451.2	1.50	180.00	-120.1	
6	8465.7	0.00	0.00	8437.3	173.7	451.2	0.00	0.00	-120.1	
7	9283.3	89.93	179.22	8958.2	-346.5	458.3	11.00	179.22	397.4	
8	9347.6	89.93	179.22	8958.2	-410.8	459.2	0.00	0.00	461.4	4-14-3-2 CP Tgt
9	9497.6	89.93	179.22	8958.4	-560.8	461.2	0.00	0.00	610.6	
10	9597.6	92.93	179.22	8955.9	-660.8	462.6	3.00	-0.06	710.0	
11	13332.9	92.93	179.22	8765.0	-4390.8	513.6	0.00	0.00	4420.8	4-14-3-2 BHL Tgt

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
4-14-3-2 SL_Tgt	0.0	0.0	0.0	2211393.80	620367.94	40° 13' 43.930 N	110° 5' 7.930 W	Point
Sec 14 Lines	0.0	0.0	0.0	2211393.80	620367.94	40° 13' 43.930 N	110° 5' 7.930 W	Polygo
Sec 14 Setbacks	0.0	0.0	0.0	2211393.80	620367.94	40° 13' 43.930 N	110° 5' 7.930 W	Polygo
4-14-3-2 BHL_Tgt	8765.0	-4390.8	513.6	2210058.22	620545.61	40° 13' 0.540 N	110° 5' 1.310 W	Point
4-14-3-2 CP_Tgt	8958.0	-410.8	459.2	2211270.78	620509.85	40° 13' 39.870 N	110° 5' 2.010 W	Point



RECEIVED: May 02, 2013

**HALLIBURTON**

Duchesne County, UT

**Plan Report for 4-14-3-2WH - Plan A Rev 0 Proposed Permit Only**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
3,100.0	1.50	68.95	3,100.0	0.5	1.2	-0.3	1.50	1.50	0.00	68.95
3,200.0	3.00	68.95	3,199.9	1.9	4.9	-1.3	1.50	1.50	0.00	0.00
3,300.0	4.50	68.95	3,299.7	4.2	11.0	-2.9	1.50	1.50	0.00	0.00
3,400.0	6.00	68.95	3,399.3	7.5	19.5	-5.2	1.50	1.50	0.00	0.00
3,466.7	7.00	68.95	3,465.5	10.2	26.6	-7.1	1.50	1.50	0.00	0.00
3,500.0	7.00	68.95	3,498.6	11.7	30.4	-8.1	0.00	0.00	0.00	0.00
3,600.0	7.00	68.95	3,597.8	16.1	41.7	-11.1	0.00	0.00	0.00	0.00
3,700.0	7.00	68.95	3,697.1	20.4	53.1	-14.1	0.00	0.00	0.00	0.00
3,800.0	7.00	68.95	3,796.4	24.8	64.5	-17.2	0.00	0.00	0.00	0.00
3,900.0	7.00	68.95	3,895.6	29.2	75.9	-20.2	0.00	0.00	0.00	0.00
4,000.0	7.00	68.95	3,994.9	33.6	87.2	-23.2	0.00	0.00	0.00	0.00
4,100.0	7.00	68.95	4,094.1	37.9	98.6	-26.2	0.00	0.00	0.00	0.00
4,200.0	7.00	68.95	4,193.4	42.3	110.0	-29.3	0.00	0.00	0.00	0.00
4,300.0	7.00	68.95	4,292.6	46.7	121.4	-32.3	0.00	0.00	0.00	0.00
4,400.0	7.00	68.95	4,391.9	51.1	132.7	-35.3	0.00	0.00	0.00	0.00
4,500.0	7.00	68.95	4,491.1	55.5	144.1	-38.3	0.00	0.00	0.00	0.00
4,600.0	7.00	68.95	4,590.4	59.8	155.5	-41.4	0.00	0.00	0.00	0.00
4,700.0	7.00	68.95	4,689.6	64.2	166.8	-44.4	0.00	0.00	0.00	0.00
4,800.0	7.00	68.95	4,788.9	68.6	178.2	-47.4	0.00	0.00	0.00	0.00
4,900.0	7.00	68.95	4,888.2	73.0	189.6	-50.4	0.00	0.00	0.00	0.00
5,000.0	7.00	68.95	4,987.4	77.3	201.0	-53.5	0.00	0.00	0.00	0.00
5,100.0	7.00	68.95	5,086.7	81.7	212.3	-56.5	0.00	0.00	0.00	0.00
5,200.0	7.00	68.95	5,185.9	86.1	223.7	-59.5	0.00	0.00	0.00	0.00
5,300.0	7.00	68.95	5,285.2	90.5	235.1	-62.6	0.00	0.00	0.00	0.00
5,400.0	7.00	68.95	5,384.4	94.9	246.5	-65.6	0.00	0.00	0.00	0.00
5,500.0	7.00	68.95	5,483.7	99.2	257.8	-68.6	0.00	0.00	0.00	0.00
5,600.0	7.00	68.95	5,582.9	103.6	269.2	-71.6	0.00	0.00	0.00	0.00
5,700.0	7.00	68.95	5,682.2	108.0	280.6	-74.7	0.00	0.00	0.00	0.00

**HALLIBURTON**

Duchesne County, UT

**Plan Report for 4-14-3-2WH - Plan A Rev 0 Proposed Permit Only**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
5,800.0	7.00	68.95	5,781.4	112.4	292.0	-77.7	0.00	0.00	0.00	0.00
5,900.0	7.00	68.95	5,880.7	116.7	303.3	-80.7	0.00	0.00	0.00	0.00
6,000.0	7.00	68.95	5,980.0	121.1	314.7	-83.7	0.00	0.00	0.00	0.00
6,100.0	7.00	68.95	6,079.2	125.5	326.1	-86.8	0.00	0.00	0.00	0.00
6,200.0	7.00	68.95	6,178.5	129.9	337.5	-89.8	0.00	0.00	0.00	0.00
6,300.0	7.00	68.95	6,277.7	134.2	348.8	-92.8	0.00	0.00	0.00	0.00
6,400.0	7.00	68.95	6,377.0	138.6	360.2	-95.8	0.00	0.00	0.00	0.00
6,500.0	7.00	68.95	6,476.2	143.0	371.6	-98.9	0.00	0.00	0.00	0.00
6,600.0	7.00	68.95	6,575.5	147.4	382.9	-101.9	0.00	0.00	0.00	0.00
6,700.0	7.00	68.95	6,674.7	151.8	394.3	-104.9	0.00	0.00	0.00	0.00
6,800.0	7.00	68.95	6,774.0	156.1	405.7	-108.0	0.00	0.00	0.00	0.00
6,900.0	7.00	68.95	6,873.2	160.5	417.1	-111.0	0.00	0.00	0.00	0.00
6,966.7	7.00	68.95	6,939.4	163.4	424.6	-113.0	0.00	0.00	0.00	0.00
7,000.0	6.50	68.95	6,972.5	164.8	428.3	-114.0	1.50	-1.50	0.00	180.00
7,100.0	5.00	68.95	7,072.0	168.4	437.7	-116.5	1.50	-1.50	0.00	180.00
7,200.0	3.50	68.95	7,171.7	171.1	444.6	-118.3	1.50	-1.50	0.00	180.00
7,300.0	2.00	68.95	7,271.6	172.8	449.1	-119.5	1.50	-1.50	0.00	180.00
7,400.0	0.50	68.95	7,371.6	173.6	451.1	-120.0	1.50	-1.50	0.00	180.00
7,433.3	0.00	0.00	7,404.9	173.7	451.2	-120.1	1.50	-1.50	0.00	-180.00
7,500.0	0.00	0.00	7,471.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
7,600.0	0.00	0.00	7,571.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
7,700.0	0.00	0.00	7,671.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
7,800.0	0.00	0.00	7,771.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
7,900.0	0.00	0.00	7,871.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
8,000.0	0.00	0.00	7,971.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
8,100.0	0.00	0.00	8,071.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
8,200.0	0.00	0.00	8,171.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
8,300.0	0.00	0.00	8,271.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
8,400.0	0.00	0.00	8,371.6	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
8,465.7	0.00	0.00	8,437.3	173.7	451.2	-120.1	0.00	0.00	0.00	0.00
<b>KOP at 8465.7 ft</b>										
8,500.0	3.77	179.22	8,471.6	172.5	451.2	-118.9	11.00	11.00	0.00	179.22
8,550.0	9.27	179.22	8,521.2	166.9	451.3	-113.3	11.00	11.00	0.00	0.00
8,600.0	14.77	179.22	8,570.1	156.4	451.5	-102.9	11.00	11.00	0.00	0.00
8,650.0	20.27	179.22	8,617.8	141.4	451.7	-88.0	11.00	11.00	0.00	0.00
8,700.0	25.77	179.22	8,663.8	121.8	451.9	-68.5	11.00	11.00	0.00	0.00
8,750.0	31.27	179.22	8,707.7	98.0	452.3	-44.8	11.00	11.00	0.00	0.00
8,800.0	36.77	179.22	8,749.1	70.0	452.6	-17.0	11.00	11.00	0.00	0.00
8,850.0	42.27	179.22	8,787.7	38.2	453.1	14.7	11.00	11.00	0.00	0.00
8,900.0	47.77	179.22	8,823.0	2.9	453.5	49.8	11.00	11.00	0.00	0.00
8,950.0	53.27	179.22	8,854.8	-35.7	454.1	88.2	11.00	11.00	0.00	0.00
9,000.0	58.77	179.22	8,882.7	-77.1	454.6	129.4	11.00	11.00	0.00	0.00
9,050.0	64.27	179.22	8,906.5	-121.1	455.2	173.1	11.00	11.00	0.00	0.00
9,100.0	69.77	179.22	8,926.0	-167.1	455.9	218.9	11.00	11.00	0.00	0.00
9,150.0	75.27	179.22	8,941.1	-214.8	456.5	266.3	11.00	11.00	0.00	0.00
9,200.0	80.77	179.22	8,951.4	-263.6	457.2	315.0	11.00	11.00	0.00	0.00
9,250.0	86.27	179.22	8,957.1	-313.3	457.9	364.4	11.00	11.00	0.00	0.00
9,283.3	89.93	179.22	8,958.2	-346.6	458.3	397.5	10.98	10.98	0.00	0.00
<b>End Build at 9283.3 ft</b>										
9,300.0	89.93	179.22	8,958.2	-363.3	458.5	414.1	0.00	0.00	0.00	0.00
9,347.6	89.93	179.22	8,958.2	-410.9	459.2	461.4	0.00	0.00	0.00	0.00
<b>Casing Point at 9347.6 MD &amp; 8958.2 TVD - 7"</b>										
9,400.0	89.93	179.22	8,958.3	-463.3	459.9	513.6	0.00	0.00	0.00	0.00
9,497.6	89.93	179.22	8,958.4	-560.8	461.2	610.6	0.00	0.00	0.00	0.00
9,500.0	90.00	179.22	8,958.4	-563.3	461.3	613.0	3.00	3.00	0.00	-0.06
9,597.6	92.93	179.22	8,955.9	-660.8	462.6	710.0	3.00	3.00	0.00	-0.06
9,600.0	92.93	179.22	8,955.8	-663.2	462.6	712.4	0.00	0.00	0.00	0.00
9,700.0	92.93	179.22	8,950.7	-763.1	464.0	811.8	0.00	0.00	0.00	0.00
9,800.0	92.93	179.22	8,945.6	-862.9	465.3	911.1	0.00	0.00	0.00	0.00

**HALLIBURTON**

Duchesne County, UT

**Plan Report for 4-14-3-2WH - Plan A Rev 0 Proposed Permit Only**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
9,900.0	92.93	179.22	8,940.5	-962.8	466.7	1,010.5	0.00	0.00	0.00	0.00
10,000.0	92.93	179.22	8,935.4	-1,062.6	468.1	1,109.8	0.00	0.00	0.00	0.00
10,100.0	92.93	179.22	8,930.3	-1,162.5	469.4	1,209.2	0.00	0.00	0.00	0.00
10,200.0	92.93	179.22	8,925.1	-1,262.4	470.8	1,308.5	0.00	0.00	0.00	0.00
10,300.0	92.93	179.22	8,920.0	-1,362.2	472.2	1,407.8	0.00	0.00	0.00	0.00
10,400.0	92.93	179.22	8,914.9	-1,462.1	473.5	1,507.2	0.00	0.00	0.00	0.00
10,500.0	92.93	179.22	8,909.8	-1,561.9	474.9	1,606.5	0.00	0.00	0.00	0.00
10,600.0	92.93	179.22	8,904.7	-1,661.8	476.3	1,705.9	0.00	0.00	0.00	0.00
10,700.0	92.93	179.22	8,899.6	-1,761.7	477.6	1,805.2	0.00	0.00	0.00	0.00
10,800.0	92.93	179.22	8,894.5	-1,861.5	479.0	1,904.6	0.00	0.00	0.00	0.00
10,900.0	92.93	179.22	8,889.4	-1,961.4	480.4	2,003.9	0.00	0.00	0.00	0.00
11,000.0	92.93	179.22	8,884.3	-2,061.2	481.7	2,103.2	0.00	0.00	0.00	0.00
11,100.0	92.93	179.22	8,879.1	-2,161.1	483.1	2,202.6	0.00	0.00	0.00	0.00
11,200.0	92.93	179.22	8,874.0	-2,261.0	484.5	2,301.9	0.00	0.00	0.00	0.00
11,300.0	92.93	179.22	8,868.9	-2,360.8	485.8	2,401.3	0.00	0.00	0.00	0.00
11,400.0	92.93	179.22	8,863.8	-2,460.7	487.2	2,500.6	0.00	0.00	0.00	0.00
11,500.0	92.93	179.22	8,858.7	-2,560.5	488.5	2,600.0	0.00	0.00	0.00	0.00
11,600.0	92.93	179.22	8,853.6	-2,660.4	489.9	2,699.3	0.00	0.00	0.00	0.00
11,700.0	92.93	179.22	8,848.5	-2,760.3	491.3	2,798.6	0.00	0.00	0.00	0.00
11,800.0	92.93	179.22	8,843.4	-2,860.1	492.6	2,898.0	0.00	0.00	0.00	0.00
11,900.0	92.93	179.22	8,838.2	-2,960.0	494.0	2,997.3	0.00	0.00	0.00	0.00
12,000.0	92.93	179.22	8,833.1	-3,059.8	495.4	3,096.7	0.00	0.00	0.00	0.00
12,100.0	92.93	179.22	8,828.0	-3,159.7	496.7	3,196.0	0.00	0.00	0.00	0.00
12,200.0	92.93	179.22	8,822.9	-3,259.6	498.1	3,295.4	0.00	0.00	0.00	0.00
12,300.0	92.93	179.22	8,817.8	-3,359.4	499.5	3,394.7	0.00	0.00	0.00	0.00
12,400.0	92.93	179.22	8,812.7	-3,459.3	500.8	3,494.0	0.00	0.00	0.00	0.00
12,500.0	92.93	179.22	8,807.6	-3,559.1	502.2	3,593.4	0.00	0.00	0.00	0.00
12,600.0	92.93	179.22	8,802.5	-3,659.0	503.6	3,692.7	0.00	0.00	0.00	0.00
12,700.0	92.93	179.22	8,797.4	-3,758.9	504.9	3,792.1	0.00	0.00	0.00	0.00
12,800.0	92.93	179.22	8,792.2	-3,858.7	506.3	3,891.4	0.00	0.00	0.00	0.00
12,900.0	92.93	179.22	8,787.1	-3,958.6	507.6	3,990.7	0.00	0.00	0.00	0.00
13,000.0	92.93	179.22	8,782.0	-4,058.4	509.0	4,090.1	0.00	0.00	0.00	0.00
13,100.0	92.93	179.22	8,776.9	-4,158.3	510.4	4,189.4	0.00	0.00	0.00	0.00
13,200.0	92.93	179.22	8,771.8	-4,258.2	511.7	4,288.8	0.00	0.00	0.00	0.00
13,300.0	92.93	179.22	8,766.7	-4,358.0	513.1	4,388.1	0.00	0.00	0.00	0.00
13,332.9	92.93	179.22	8,765.0	-4,390.8	513.6	4,420.8	0.00	0.00	0.00	0.00

TD at 13332.9 ft

**Plan Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
8,465.7	8,437.3	0.0	0.0	KOP at 8465.7 ft
9,283.3	8,958.2	10.2	26.6	End Build at 9283.3 ft
9,347.6	8,958.2	163.4	424.6	Casing Point at 9347.6 MD & 8958.2 TVD
13,332.9	8,765.0	173.7	451.2	TD at 13332.9 ft

**Vertical Section Information**

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	+E/-W (ft)	Start TVD (ft)
Target	4-14-3-2 BHL_Tgt	173.33	Slot	0.0	0.0	8,765.0

**HALLIBURTON**

Duchesne County, UT

**Plan Report for 4-14-3-2WH - Plan A Rev 0 Proposed Permit Only****Survey tool program**

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.0	13,332.9	Plan A Rev 0 Proposed Permit Only	MWD

**Casing Details**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
9,347.6	8,958.2	7"	7.000	7.500

***Targets associated with this wellbore***

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
4-14-3-2 CP_Tgt	8,958.0	-410.8	459.2	Point
Sec 14 Setbacks	0.0	0.0	0.0	Polygon
4-14-3-2 SL_Tgt	0.0	0.0	0.0	Point
Sec 14 Lines	0.0	0.0	0.0	Polygon
4-14-3-2 BHL_Tgt	8,765.0	-4,390.8	513.6	Point

**North Reference Sheet for Sec. 14-T3S-R2W - 4-14-3-2WH - Plan A Rev 0 Permit**

All data is in Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to WELL @ 5436.0ft (Original Well Elev). Northing and Easting are relative to Sec. 14-T3S-R2W

Coordinate System is US State Plane 1983, Utah Central Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is -111.50°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:40° 39' 0.000 N°

False Easting: 500,000.00m, False Northing: 2,000,000.00m, Scale Reduction: 0.99992240

Grid Coordinates of Well: 2,211,393.80 m N, 620,367.94 m E

Geographical Coordinates of Well: 40° 13' 43.93" N, 110° 05' 07.93" W

Grid Convergence at Surface is: 0.91°

Based upon Minimum Curvature type calculations, at a Measured Depth of 13,332.86ft  
the Bottom Hole Displacement is 4,420.76ft in the Direction of 173.33° ( True).

Magnetic Convergence at surface is: -10.27° (23 January 2013, , BGGM2012)



**AFFIDAVIT OF EASEMENT, RIGHT-OF-WAY AND  
SURFACE USE AGREEMENT**

Peter Burns personally appeared before me, being duly sworn, deposes and with respect to State of Utah R649-3-34.7 says:

1. My name is Peter Burns. I am a Landman for Newfield Production Company, whose address is 1001 17<sup>th</sup> Street, Suite 2000, Denver, CO 80202 ("Newfield").
2. Newfield is the Operator of the proposed Dart 4-14-3-2WH well with a surface location to be positioned in the NWNW of Section 14, Township 3 South, Range 2 West (the "Drillsite Location"), and a bottom hole location to be positioned in the SWSW of Section 14, Township 3 South, Range 2 West, Duchesne County, Utah. The surface owner of the Drillsite Location is Dart Homestead Ranch, Inc., whose address is Route 2, Box 2044, Roosevelt, UT 84066 ("Surface Owner").
3. Newfield and the Surface Owner have agreed upon an Easement, Right-of-Way and Surface Use Agreement dated February 16, 2013 covering the Drillsite Location and access to the Drillsite Location.

FURTHER AFFIANT SAYETH NOT.

  
\_\_\_\_\_  
Peter Burns

**ACKNOWLEDGEMENT**

STATE OF COLORADO       §  
  §  
COUNTY OF DENVER       §

Before me, a Notary Public, in and for the State, on this 19th day of February 2013, personally appeared Peter Burns, to me known to be the identical person who executed the foregoing instrument, and acknowledged to me that he executed the same as his own free and voluntary act and deed for the uses and purposes therein set forth.

  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:



## AFFIDAVIT OF EASEMENT AND RIGHT-OF-WAY

Peter Burns personally appeared before me, being duly sworn, deposes and with respect to State of Utah R649-3-34.7 says:

1. My name is Peter Burns. I am a Landman for Newfield Production Company, whose address is 1001 17<sup>th</sup> Street, Suite 2000, Denver, CO 80202 ("Newfield").
2. Newfield is the Operator of the proposed Dart 4-14-3-2WH well with a surface location to be positioned in the NWNW of Section 14, Township 3 South, Range 2 West, Duchesne County, Utah (the "Drillsite Location"). The surface owner of a portion of the access road route is Mack Rideout, Personal Representative of the Estate of Sherman D. Rideout, whose address is 3634 Capstone Ave., Salt Lake City, UT 84121 ("Surface Owner").
3. Newfield and the Surface Owner have agreed upon an Easement and Right-of-Way dated December 10, 2012 covering the SWNW of Section 14, Township 3 South, Range 2 West, Duchesne County, Utah.

FURTHER AFFIANT SAYETH NOT.

  
Peter Burns

### ACKNOWLEDGEMENT

STATE OF COLORADO       §  
  §  
COUNTY OF DENVER       §

Before me, a Notary Public, in and for the State, on this 19th day of February, 2012, personally appeared Peter Burns, to me known to be the identical person who executed the foregoing instrument, and acknowledged to me that he executed the same as his own free and voluntary act and deed for the uses and purposes therein set forth.

  
NOTARY PUBLIC

My Commission Expires:





## AFFIDAVIT OF EASEMENT AND RIGHT-OF-WAY

Peter Burns personally appeared before me, being duly sworn, deposes and with respect to State of Utah R649-3-34.7 says:

1. My name is Peter Burns. I am a Landman for Newfield Production Company, whose address is 1001 17<sup>th</sup> Street, Suite 2000, Denver, CO 80202 ("Newfield").
2. Newfield is the Operator of the proposed Dart 4-14-3-2WH well with a surface location to be positioned in the NWNW of Section 14, Township 3 South, Range 2 West, Duchesne County, Utah (the "Drillsite Location"). The surface owner of a portion of the access road and pipeline route is William Mellema, Jr. - Trustee, whose address is P.O. Box 1198, Parker, CO 80134-1198 ("Surface Owner").
3. Newfield and the Surface Owner have agreed upon an Easement and Right-of-Way dated September 20, 2012 covering the N/2 and SE/4SW/4 of Section 15, Township 3 South, Range 2 West, Duchesne County, Utah.

FURTHER AFFIANT SAYETH NOT.

  
\_\_\_\_\_  
Peter Burns

### ACKNOWLEDGEMENT

STATE OF COLORADO       §  
  §  
COUNTY OF DENVER       §

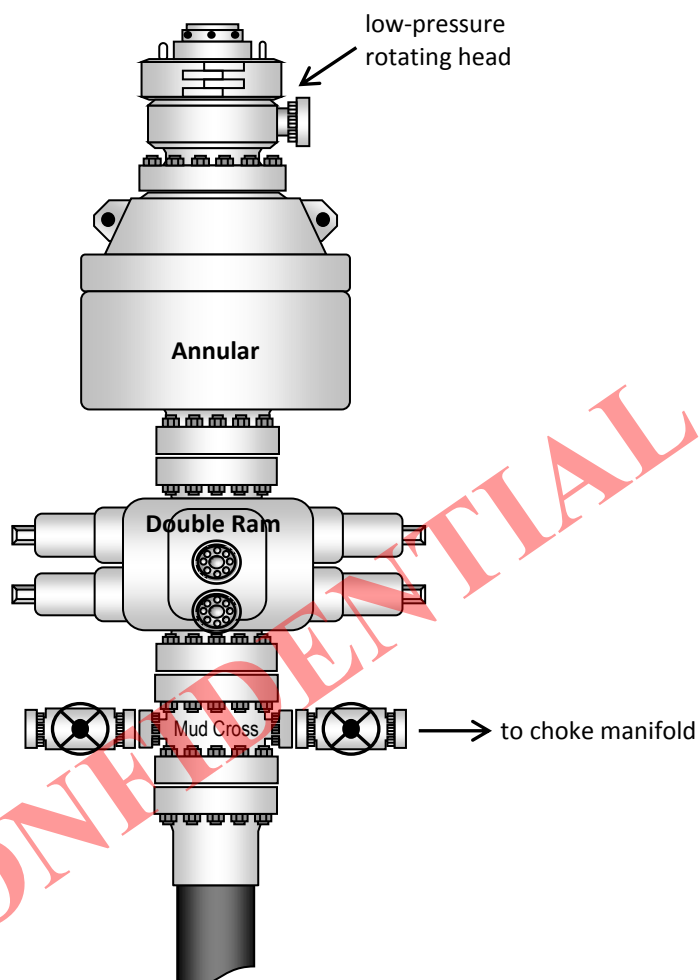
Before me, a Notary Public, in and for the State, on this 19th day of February, 2012, personally appeared Peter Burns, to me known to be the identical person who executed the foregoing instrument, and acknowledged to me that he executed the same as his own free and voluntary act and deed for the uses and purposes therein set forth.

  
\_\_\_\_\_  
NOTARY PUBLIC

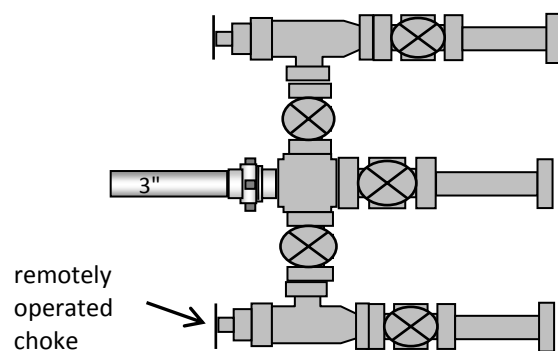
My Commission Expires:



**Typical 5M BOP stack configuration**



**Typical 5M choke manifold configuration**



NEWFIELD



February 21, 2013

State of Utah  
Division of Oil, Gas & Mining  
ATTN: Brad Hill  
P O Box 145801  
Salt Lake City, UT 84114

**Newfield Exploration Company**

1001 17th Street | Suite 2000  
Denver, Colorado 80202  
PH 303-893-0102 | FAX 303-893-0103

RE: **Dart 4-14-3-2WH**  
Section 14, T3S, R2W  
Duchesne County, Utah

Mr. Hill,

Newfield Production Company proposes to drill the Dart 4-14-3-2WH from a surface location of 250' FNL & 201' FWL of Section 14, T3S, R2W. Newfield shall case and cement the Dart 4-14-3-2WH wellbore from the surface location to the point where the wellbore reaches the legal setback of 660' FNL and 660' FWL of Section 14, T3S, R2W. The cased and cemented portion of the wellbore shall be neither perforated nor produced. In the event a future recompletion into the cased and cemented portion of the wellbore is proposed, Newfield shall file the appropriate application with the State of Utah.

Newfield is operator of the Velma 2-11-3-2WH well, and the proposed State 4-11-3-2WH well, both located in the northern offset drilling and spacing unit (Section 11, T3S, R2W). Additionally, Newfield is the operator of the proposed Parkinson 14-15-3-2W well, located in the western offset drilling and spacing unit (Section 15, T3S, R2W). Due to the above circumstances, Newfield respectfully requests that DOGM administratively grant an exception location for the Dart 4-14-3-2WH.

If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4466 or by email at [rnMiller@newfield.com](mailto:rnMiller@newfield.com). Your consideration of this matter is greatly appreciated.

Sincerely,



Robert N. Miller II  
Landman

## NEWFIELD EXPLORATION COMPANY

## LOCATION LAYOUT FOR

#4-14-3-2WH

SECTION 14, T3S, R2W, U.S.B.&amp;M.

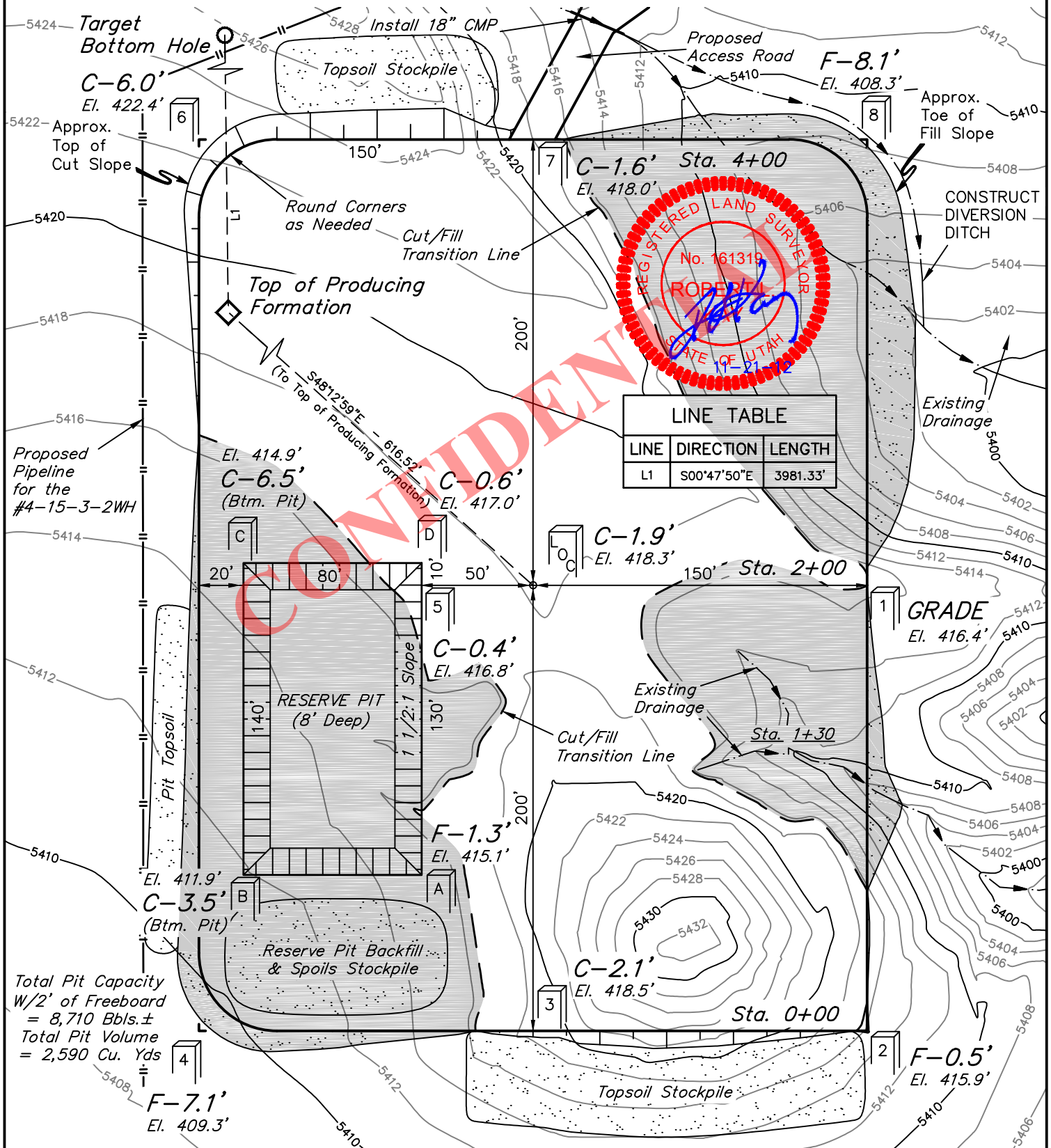
250' FNL 201' FWL

FIGURE #1

SCALE: 1" = 60'

DATE: 11-15-12

DRAWN BY: S.F.



Elev. Ungraded Ground At Loc. Stake = 5418.3'  
 FINISHED GRADE ELEV. AT LOC. STAKE = 5416.4'

UINTAH ENGINEERING & LAND SURVEYING  
 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: May 02, 2013

## NEWFIELD EXPLORATION COMPANY

## TYPICAL CROSS SECTIONS FOR

#4-14-3-2WH

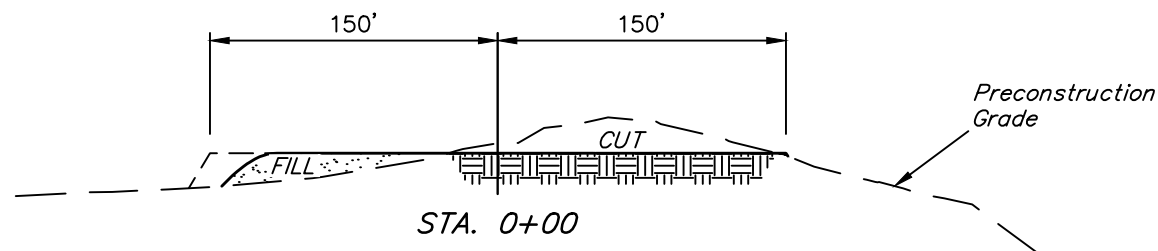
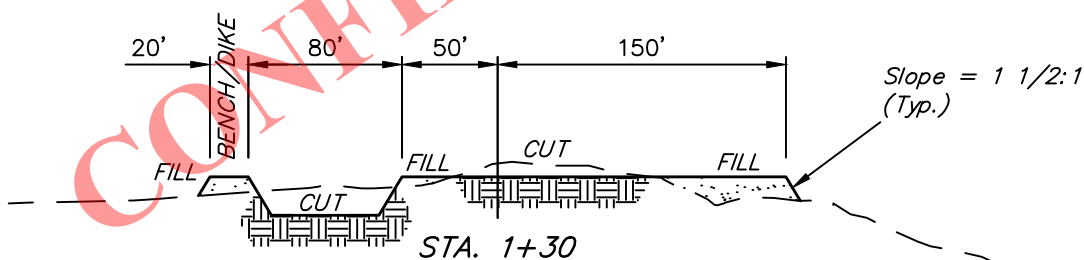
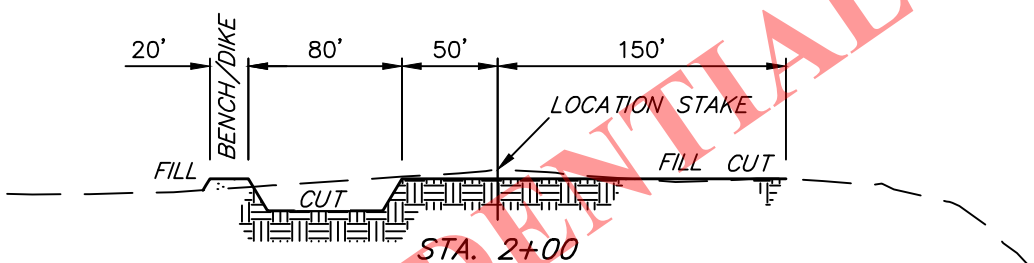
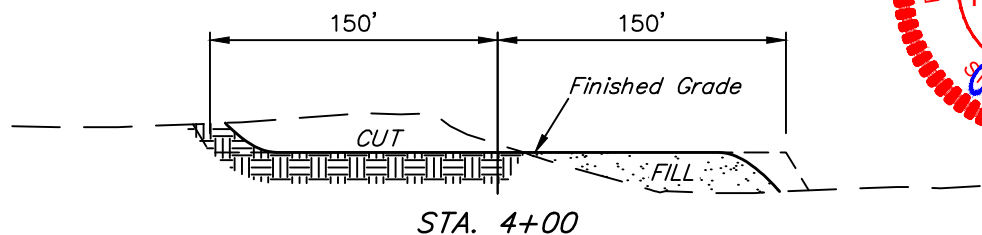
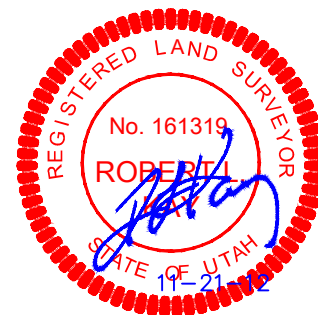
SECTION 14, T3S, R2W, U.S.B.&amp;M.

250' FNL 201' FWL

FIGURE #2

1" = 40'  
X-Section  
Scale  
1" = 100'

DATE: 11-15-12  
DRAWN BY: S.F.



## NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

## APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ± 4.591 ACRES  
ACCESS ROAD DISTURBANCE = ± 1.798 ACRES  
TOTAL = ± 6.389 ACRES

\* NOTE:  
FILL QUANTITY INCLUDES 5% FOR COMPACTION

## APPROXIMATE YARDAGES

(6") Topsoil Stripping = 2,430 Cu. Yds.  
Remaining Location = 10,210 Cu. Yds.  
TOTAL CUT = 12,640 CU. YDS.  
FILL = 8,910 CU. YDS.

EXCESS MATERIAL = 3,730 Cu. Yds.  
Topsoil & Pit Backfill = 3,730 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: May 02, 2013

## NEWFIELD EXPLORATION COMPANY

## TYPICAL RIG LAYOUT FOR

#4-14-3-2WH

SECTION 14, T3S, R2W, U.S.B.&amp;M.

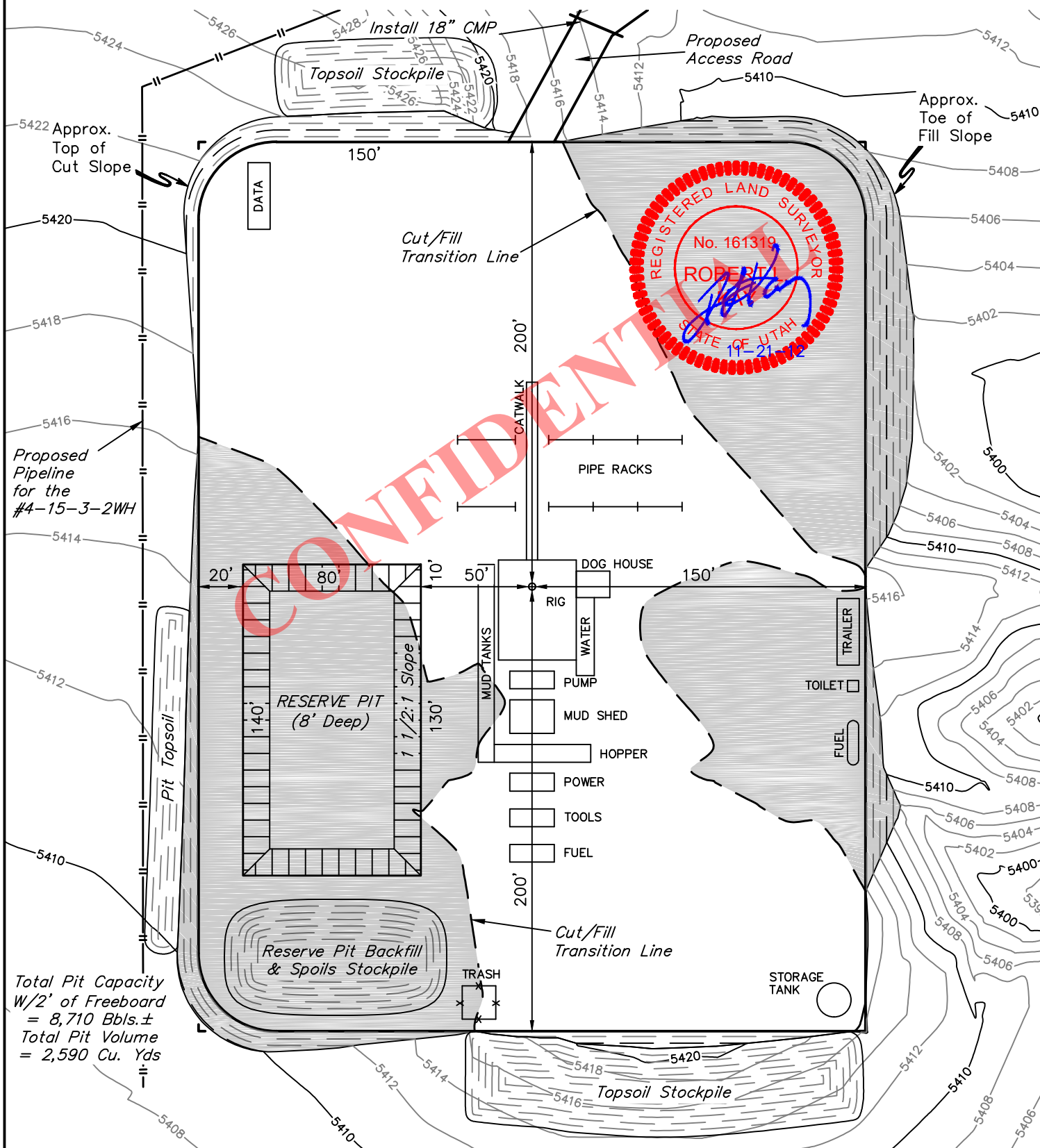
250' FNL 201' FWL

FIGURE #3

SCALE: 1" = 60'

DATE: 11-15-12

DRAWN BY: S.F.



Total Pit Capacity  
W/2' of Freeboard  
= 8,710 Bbls.±  
Total Pit Volume  
= 2,590 Cu. Yds

UINTAH ENGINEERING &amp; LAND SURVEYING

85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

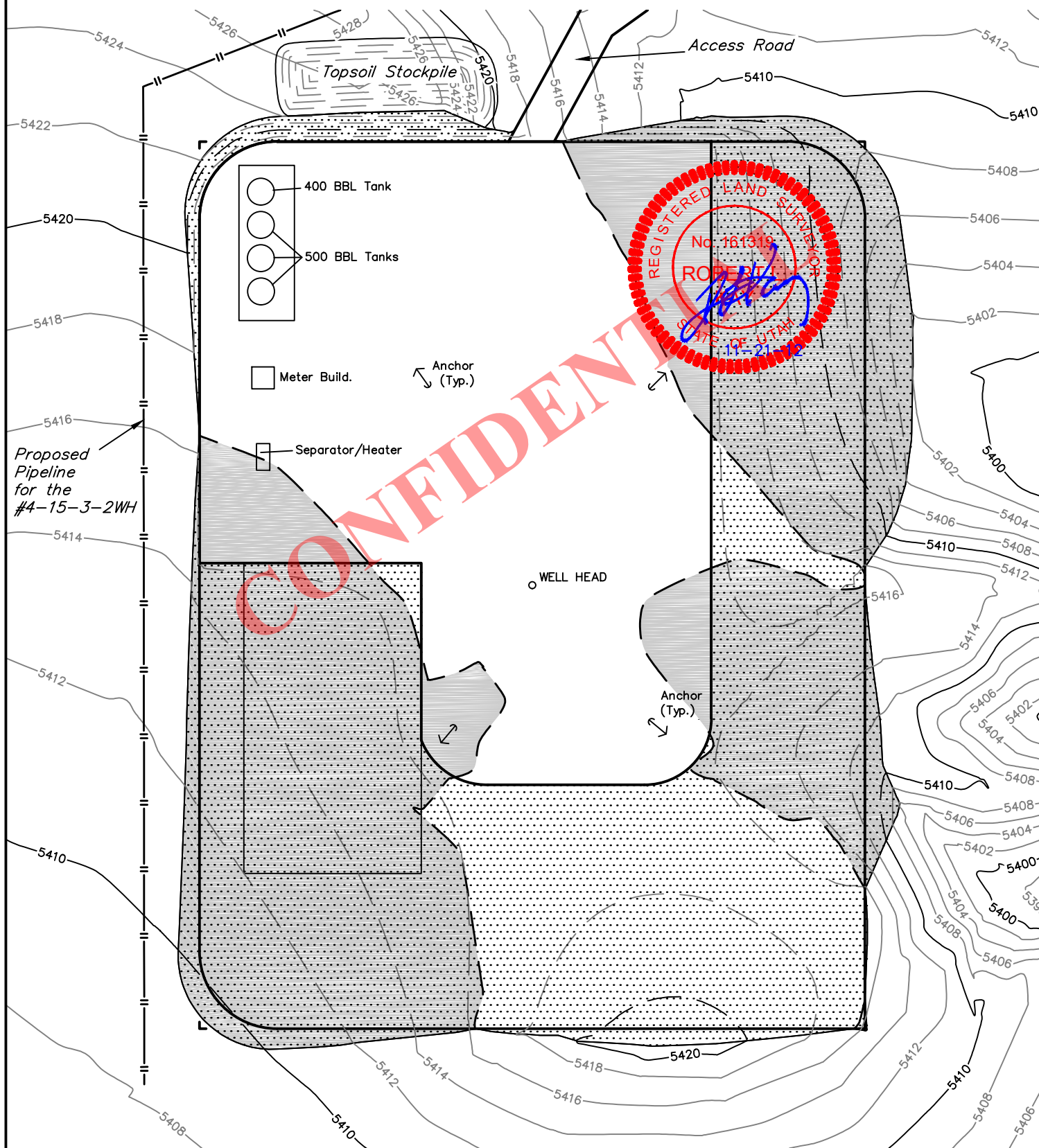
RECEIVED: May 02, 2013



**NEWFIELD EXPLORATION COMPANY**  
**PRODUCTION FACILITY LAYOUT FOR**  
**#4-14-3-2WH**  
**SECTION 14, T3S, R2W, U.S.B.&M.**  
**250' FNL 201' FWL**

**FIGURE #4**

SCALE: 1" = 60'  
 DATE: 11-15-12  
 DRAWN BY: S.F.

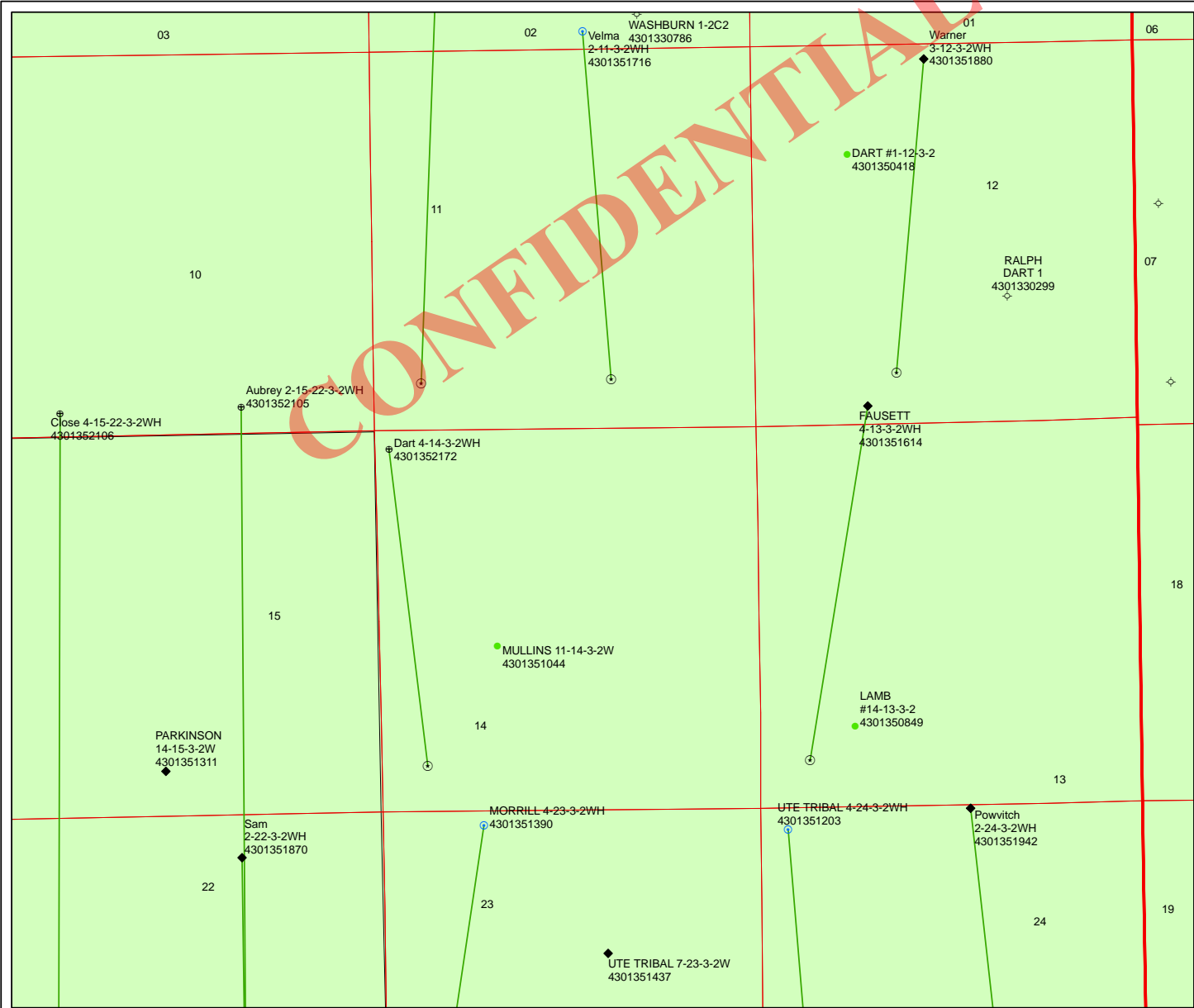


RECLAIMED AREA

APPROXIMATE ACREAGES  
 UN-RECLAIMED =  $\pm 1.292$  ACRES

**UINTAH ENGINEERING & LAND SURVEYING**  
 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

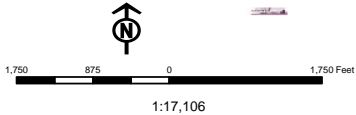
RECEIVED: May 02, 2013



**API Number: 4301352172**  
**Well Name: Dart 4-14-3-2WH**  
**Township T03.0S Range R02.0W Section 14**  
**Meridian: UBM**  
**Operator: NEWFIELD PRODUCTION COMPANY**

Map Prepared:  
Map Produced by Diana Mason

- Units**
- | STATUS       | UNIT         |
|--------------|--------------|
| ACTIVE       | ACTIVE       |
| EXPLORATORY  | EXPLORATORY  |
| GAS STORAGE  | GAS STORAGE  |
| NF PP OIL    | NF PP OIL    |
| NF SECONDARY | NF SECONDARY |
| PI OIL       | PI OIL       |
| PP GAS       | PP GAS       |
| PP GEOTHERML | PP GEOTHERML |
| PP OIL       | PP OIL       |
| SECONDARY    | SECONDARY    |
| TERMINATED   | TERMINATED   |
- Fields**
- | STATUS     | FIELD      |
|------------|------------|
| Unknown    | Unknown    |
| ABANDONED  | ABANDONED  |
| ACTIVE     | ACTIVE     |
| COMBINED   | COMBINED   |
| INACTIVE   | INACTIVE   |
| STORAGE    | STORAGE    |
| TERMINATED | TERMINATED |





Well Name	NEWFIELD PRODUCTION COMPANY Dart 4-14-3-2WH 43013521720			
String	Cond	Surf	I1	Prod
Casing Size(in)	14.000	9.625	7.000	4.500
Setting Depth (TVD)	60	2500	8958	8765
Previous Shoe Setting Depth (TVD)	0	60	2500	8958
Max Mud Weight (ppg)	8.3	8.3	11.5	11.5
BOPE Proposed (psi)	0	500	5000	5000
Casing Internal Yield (psi)	1000	3520	11220	12410
Operators Max Anticipated Pressure (psi)	5014			11.0

Calculations	Cond String	14.000	"
Max BHP (psi)	.052*Setting Depth*MW=	26	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	19	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	13	NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	13	NO
Required Casing/BOPE Test Pressure=		60	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

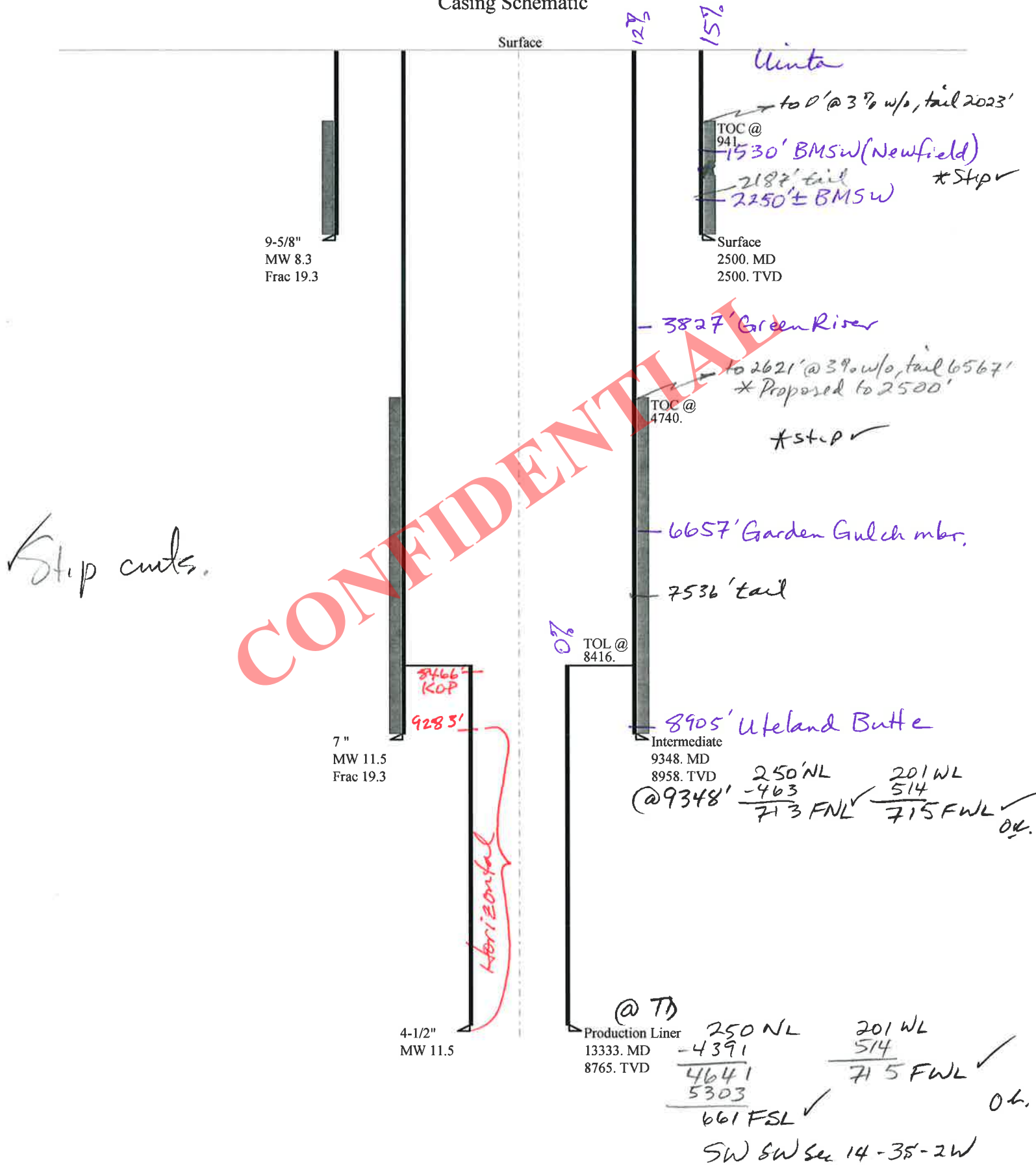
Calculations	Surf String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	1079	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	779	NO diverter, air or fresh wtr systm
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	529	NO OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	542	NO No expected pressure
Required Casing/BOPE Test Pressure=		2464	psi
*Max Pressure Allowed @ Previous Casing Shoe=		60	psi *Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	5357	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4282	YES 5M BOPE, 2 ram preventers, annular
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3386	YES preventer, 5M choke manifold
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3936	NO OK
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2500	psi *Assumes 1psi/ft frac gradient

Calculations	Prod String	4.500	"
Max BHP (psi)	.052*Setting Depth*MW=	5241	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4189	YES 5M BOPE, 2 ram preventers, annular
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3313	YES preventer, 5M choke manifold
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	5283	YES OK
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		8958	psi *Assumes 1psi/ft frac gradient

## 43013521720000 Dart 4-14-2WH

## Casing Schematic



Well name:	<b>43013521720000 Dart 4-14-2WH</b>	
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>	
String type:	Surface	Project ID: 43-013-52172
Location:	DUCHESNE COUNTY	

**Design parameters:****Collapse**

Mud weight: 8.330 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 110 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

Cement top: 941 ft

**Burst**

Max anticipated surface pressure: 2,200 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,500 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

Tension is based on buoyed weight.  
Neutral point: 2,192 ft

**Non-directional string.****Re subsequent strings:**

Next setting depth: 8,958 ft  
Next mud weight: 11.500 ppg  
Next setting BHP: 5,352 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 2,500 ft  
Injection pressure: 2,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2500	9.625	36.00	J-55	LT&C	2500	2500	8.796	20443
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1082	2020	1.867	2500	3520	1.41	78.9	453	5.74 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801.538.5357  
FAX: 501.359.3940

Date: June 3, 2013  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 2500 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43013521720000 Dart 4-14-2WH</b>	
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>	
String type:	Intermediate	Project ID: 43-013-52172
Location:	DUCHESNE COUNTY	

**Design parameters:****Collapse**

Mud weight: 11.500 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 200 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

**Burst:**

Design factor 1.00

Cement top: 4,740 ft

**Burst**

Max anticipated surface pressure: 3,381 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 5,352 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

Tension is based on buoyed weight.  
Neutral point: 7,427 ft

**Directional Info - Build & Hold**

Kick-off point 3000 ft  
Departure at shoe: 616 ft  
Maximum dogleg: 11 °/100ft  
Inclination at shoe: 89.93 °

**Re subsequent strings:**

Next setting depth: 8,958 ft  
Next mud weight: 11.500 ppg  
Next setting BHP: 5,352 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 8,958 ft  
Injection pressure: 8,958 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	9348	7	29.00	P-110	Buttress	8958	9348	6.059	112967

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	5352	8530	1.594	5352	11220	2.10	214.6	929.4	4.33 B

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801.538.5357  
FAX: 501.359.3940

Date: June 3, 2013  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 8958 ft, a mud weight of 11.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:	<b>43013521720000 Dart 4-14-2WH</b>	
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>	
String type:	Production Liner	Project ID: 43-013-52172
Location:	DUCHESNE COUNTY	

**Design parameters:****Collapse**

Mud weight: 11.500 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 198 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

**Burst**

Max anticipated surface pressure: 3,308 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 5,236 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

Tension is based on buoyed weight.  
Neutral point: 8,740 ft

Liner top: 8,416 ft

**Directional Info - Build & Hold**

Kick-off point: 3000 ft  
Departure at shoe: 4421 ft  
Maximum dogleg: 11 °/100ft  
Inclination at shoe: 92.93 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	4933	4.5	13.50	P-110	Buttress	8765	13333	3.795	29595
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	5236	10680	2.040	5279	12410	2.35	4.4	421.9	95.67 B

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801.538.5357  
FAX: 501.359.3940

Date: June 3, 2013  
Salt Lake City, Utah

**Remarks:**

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 8765 ft, a mud weight of 11.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

# **ON-SITE PREDRILL EVALUATION**

## **Utah Division of Oil, Gas and Mining**

**Operator** NEWFIELD PRODUCTION COMPANY  
**Well Name** Dart 4-14-3-2WH  
**API Number** 43013521720000      **APD No** 7924    **Field/Unit** WILDCAT  
**Location: 1/4,1/4** NWNW    **Sec** 14    **Tw** 3.0S    **Rng** 2.0W    250 FNL 201 FWL  
**GPS Coord (UTM)** 577796 4453563      **Surface Owner** Dart Homestead Ranch, Inc.

### **Participants**

Bruce Dart - land owner; Corie Miller, Mandie Crozier - Newfiled; Jim Burns - Starpoint

### **Regional/Local Setting & Topography**

The location is proposed on fallow grazing lands on the edge of the North Myton Bench. Drainages from the bench impact the site in two places. The area is rather barren of vegetation and the soils are clays. There are numerous eroded knolls and slight swales with an historic floodplain below. The location is one mile West of Highway 40 and 2 1/2 miles North of Myton just off Dart lane. The region is comprised of benches of differing levels and floodplains from the Duchesne River that has moved from its historic route. The soils are highly erodible and vegetation is sparse with the exception of the floodplains that are quite productive farmlands. Occasional buttes and numerous deep cut erosional features describe the region that is experiencing rapid growth in petroleum development.

### **Surface Use Plan**

#### **Current Surface Use**

Grazing  
Wildlife Habitat

#### **New Road Miles**

0.51

#### **Well Pad**

**Width** 300    **Length** 400

#### **Src Const Material**

Onsite

#### **Surface Formation**

UNTA

**Ancillary Facilities** N

### **Waste Management Plan Adequate?**

### **Environmental Parameters**

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

High desert shrubland ecosystem. Expected vegetation consists of black sagebrush, shadscale, Atriplex spp., mustard spp, rabbit brush, horsebrush, broom snakeweed, Opuntia spp and spring annuals.

Dominant vegetation;

Galletta, mat atriplex and broom snake weed

Wildlife;

Adjacent habitat contains forbs that may be suitable browse for deer, antelope, prairie dogs or rabbits. Wild turkeys have moved in and were encountered multiple times.

DWR did not respond with comments / issues

#### **Soil Type and Characteristics**

Heavy light colored clay soils

**Erosion Issues Y****Sedimentation Issues Y****Site Stability Issues N****Drainage Diversion Required? Y****Berm Required? Y****Erosion Sedimentation Control Required? N****Paleo Survey Run? N    Paleo Potential Observed? N    Cultural Survey Run? N    Cultural Resources? N****Reserve Pit****Site-Specific Factors****Site Ranking**

<b>Distance to Groundwater (feet)</b>	75 to 100	10
<b>Distance to Surface Water (feet)</b>		20
<b>Dist. Nearest Municipal Well (ft)</b>	500 to 1320	10
<b>Distance to Other Wells (feet)</b>	>1320	0
<b>Native Soil Type</b>	Mod permeability	10
<b>Fluid Type</b>	Oil Base Mud Fluid	15
<b>Drill Cuttings</b>	Salt or Detrimental	10
<b>Annual Precipitation (inches)</b>	10 to 20	5

**Affected Populations****Presence Nearby Utility Conduits Present 15****Final Score 95 1 Sensitivity Level****Characteristics / Requirements**

Operator intends to use an oil based drilling mud and is therefore required to use a closed loop system. If a reserve pit and freshwater is used, Pit to be dug to a depth of 8'. Because of the likely hood of disturbance to existing sandstone bedrock , pit underlayment is to be used to protect the liner from potential puncture. Pit should be fenced to prevent entry by deer, other wildlife and domestic animals. Pit to be closed within one year after drilling activities are complete.

**Closed Loop Mud Required? Y    Liner Required? Y    Liner Thickness 16    Pit Underlayment Required? Y****Other Observations / Comments**Chris Jensen  
Evaluator4/3/2013  
Date / Time



# Application for Permit to Drill

## Statement of Basis

### Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
7924	43013521720000	LOCKED	OW	P	No
<b>Operator</b>	NEWFIELD PRODUCTION COMPANY		<b>Surface Owner-APD</b>	Dart Homestead Ranch, Inc.	
<b>Well Name</b>	Dart 4-14-3-2WH		<b>Unit</b>		
<b>Field</b>	WILDCAT		<b>Type of Work</b>	DRILL	
<b>Location</b>	NWNW 14 3S 2W U 250 FNL (UTM) 577799E 4453556N		201 FWL	GPS Coord	

#### Geologic Statement of Basis

Newfield proposes to set 60' of conductor and 2,500' of surface casing at this location. The base of the moderately saline water at this location is estimated to be at a depth of 2,250'. A search of Division of Water Rights records shows 10 water wells within a 10,000 foot radius of the center of Section 14. All wells are privately owned. Depth is listed as ranging from 30 to 300 feet. Average depth is approximately 100 feet. Water use is listed as irrigation, stock watering, and domestic. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed surface casing should adequately protect useable ground water in this area.

Brad Hill  
APD Evaluator

5/15/2013  
Date / Time

#### Surface Statement of Basis

Location is proposed in a good location although outside the spacing window typical of a horizontal well. Access road enters the pad from the east. The landowner was in attendance for the pre-site inspection.

The soil type and topography at present do combine to pose a small threat to erosion or sediment/ pollution transport in these regional climate conditions.

Usual construction standards of the Operator appear to be adequate for the proposed purpose as submitted. Operator has plans to use a closed loop system an oil based mud not indicated on plans.

I recognize no special flora or animal species or cultural resources on site that the proposed action may harm. The location was previously surveyed for cultural and paleontological resources as the operator saw fit. I have advised the operator take all measures necessary to comply with ESA and MBTA and that actions insure no disturbance to species that may have not been seen during onsite visit.

The location should be bermed to prevent fluids from entering or leaving the confines of the pad. Fencing around the reserve pit will be necessary to prevent wildlife and livestock from entering. A synthetic liner of 16 mils (minimum) should be utilized in the reserve pit. Measures (BMP's) shall be taken to protect steep slopes and topsoil pile from erosion, sedimentation and stability issues. A diversion is to be built sufficient to conduct overland or channel flow according to plans submitted



Chris Jensen  
Onsite Evaluator

4/3/2013  
Date / Time

**Conditions of Approval / Application for Permit to Drill**

<b>Category</b>	<b>Condition</b>
Pits	A closed loop mud circulation system is required for this location.
Surface	Measures (BMP's) shall be taken to protect steep slopes and topsoil pile from erosion, sedimentation and stability issues.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

CONFIDENTIAL

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 5/2/2013

API NO. ASSIGNED: 43013521720000

WELL NAME: Dart 4-14-3-2WH

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695)

PHONE NUMBER: 435 719-2018

CONTACT: Don Hamilton

PROPOSED LOCATION: NWNW 14 030S 020W

Permit Tech Review: ☒

SURFACE: 0250 FNL 0201 FWL

Engineering Review: ☒

BOTTOM: 0660 FSL 0660 FWL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.22882

LONGITUDE: -110.08552

UTM SURF EASTINGS: 577799.00

NORTHINGS: 4453556.00

FIELD NAME: WILDCAT

LEASE TYPE: 4 - Fee

LEASE NUMBER: Patented

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: STATE/FEE - B001834☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: 437478☐ RDCC Review:☒ Fee Surface Agreement☐ Intent to Commingle

Commingle Approved

## LOCATION AND SITING:

☐ R649-2-3.

Unit:

☐ R649-3-2. General☒ R649-3-3. Exception☒ Drilling Unit

Board Cause No: Cause 139-90

Effective Date: 5/9/2012

Siting: 4 Prod LGRRV-WSTC Wells

☐ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 1 - Exception Location - bhill  
5 - Statement of Basis - bhill  
10 - Cement Ground Water - hmadonald  
25 - Surface Casing - hmadonald  
27 - Other - bhill

RECEIVED: June 13, 2013



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** Dart 4-14-3-2WH  
**API Well Number:** 43013521720000  
**Lease Number:** Patented  
**Surface Owner:** FEE (PRIVATE)  
**Approval Date:** 6/13/2013

### Issued to:

NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-90. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

The 7" casing string cement shall be brought back to  $\pm 2300'$  to isolate base of moderately saline ground water.

Surface casing shall be cemented to the surface.

**Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website  
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
  - contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

**Approved By:**

A handwritten signature in black ink, appearing to read "J. Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: Patented
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: RANCH 16-10-3-3-2WH	
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY	9. API NUMBER: 43013521720000	
3. ADDRESS OF OPERATOR: 1001 17th Street, Suite 2000, Denver, CO, 80202	PHONE NUMBER: 303 382-4443 Ext	9. FIELD and POOL or WILDCAT: WILDCAT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0250 FNL 0201 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 14 Township: 03.0S Range: 02.0W Meridian: U	COUNTY: DUCHESNE	
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <b>1/10/2014</b>	<input type="checkbox"/> ACIDIZE  <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Newfield Production Company respectfully requests that the bottom hole location for the Dart 4-14-3-2WH be changed to 330' FNL & 660' FEL, NENE, Section 3, T3S, R2W, USB&M and that the name be changed to the Ranch 16-10-3-3-2WH. In addition, the TD also changed from 8,765'/13,332' (TVD/MD) to 9,544'/19,372' (TVD/MD). Attached please find an updated plat package, drilling plan, horizontal plan and horizontal letter reflecting these changes. The surface footages of the proposed well remain the same.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: January 13, 2014

By: *Derek Duff*

NAME (PLEASE PRINT) Matt Barber	PHONE NUMBER 303 382-4493	TITLE Senior Regulatory Specialist
SIGNATURE N/A		DATE 1/10/2014



**The Utah Division of Oil, Gas, and Mining**

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices**

**Sundry Conditions of Approval Well Number 43013521720000**

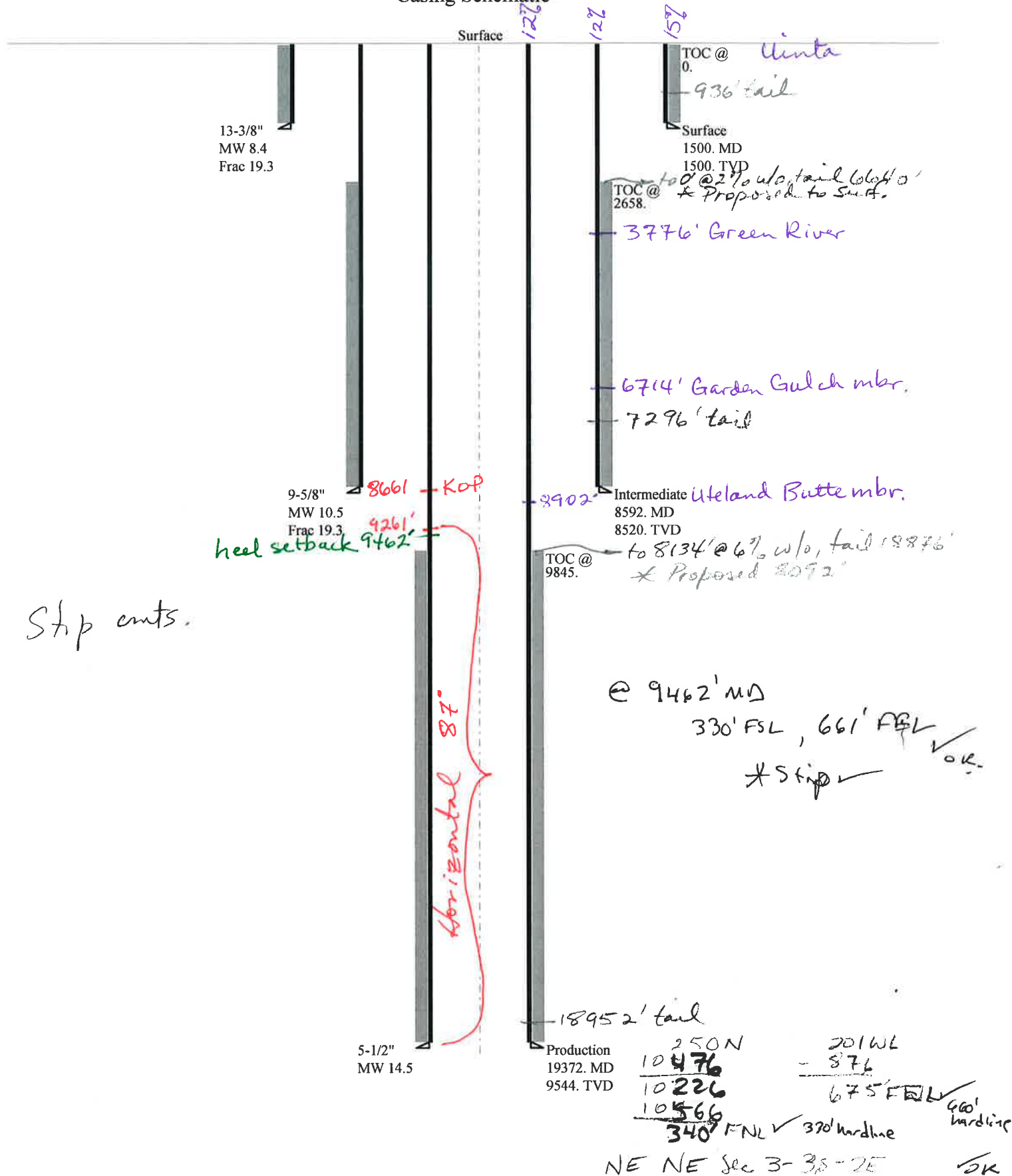
**Authorization: Board Cause No. 139-113**

**Well cannot be completed outside 330' setback (approximately 9462' MD from directional survey Plan) and the 5 1/2 " must be cemented 500' inside intermediate casing shoe (8092' MD from proposed plan) as required by Board Order.**

**Intermediate casing should be cemented from setting depth back to the surface as proposed in the drilling plan.**

# 43013521720000 Dart to Ranch 16-3-3-2WHrev

## Casing Schematic





Well name:	<b>43013521720000 Dart to Ranch 16-3-3-2WHrev</b>		
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>		
String type:	Surface	Project ID:	43-013-52172
Location:	DUCHESNE COUNTY		

**Design parameters:****Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 96 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 1,320 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 1,500 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

Tension is based on buoyed weight.  
Neutral point: 1,314 ft

**Non-directional string.****Re subsequent strings:**

Next setting depth: 8,520 ft  
Next mud weight: 10.500 ppg  
Next setting BHP: 4,647 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 1,500 ft  
Injection pressure: 1,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	1500	13.375	54.50	J-55	ST&C	1500	1500	12.49	18611
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	655	1130	1.727	1500	2730	1.82	71.6	514	7.18 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801.538.5357  
FAX: 501.359.3940

Date: January 13, 2014  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 1500 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43013521720000 Dart to Ranch 16-3-3-2WHrev</b>		
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>		
String type:	Intermediate	Project ID:	43-013-52172
Location:	DUCHESNE COUNTY		

**Design parameters:****Collapse**

Mud weight: 10.500 ppg  
Internal fluid density: 4.300 ppg

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 194 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

Cement top: 2,658 ft

**Burst**

Max anticipated surface pressure: 4,802 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 6,676 psi

Annular backup: 2.50 ppg

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

Tension is based on buoyed weight.  
Neutral point: 7,251 ft

**Directional well information:**

Kick-off point 8661 ft  
Departure at shoe: 862 ft  
Maximum dogleg: 1.5 °/100ft  
Inclination at shoe: 0 °

**Re subsequent strings:**

Next setting depth: 9,005 ft  
Next mud weight: 14.500 ppg  
Next setting BHP: 6,783 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 8,520 ft  
Injection pressure: 8,520 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	8592	9.625	40.00	N-80	Buttress	8520	8592	8.75	116987
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2744	3090	1.126	5570	5750	1.03	287.6	916.3	3.19 B

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801.538.5357  
FAX: 501.359.3940

Date: January 13, 2014  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 8520 ft, a mud weight of 10.5 ppg. An internal gradient of .223 psi/ft was used for collapse from TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>43013521720000 Dart to Ranch 16-3-3-2WHrev</b>		
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>		
String type:	Production	Project ID:	43-013-52172
Location:	DUCHESNE COUNTY		

**Design parameters:****Collapse**

Mud weight: 14.500 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 209 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

Cement top: 9,845 ft

**Burst**

Max anticipated surface pressure: 0 psi  
Internal gradient: 0.753 psi/ft  
Calculated BHP 7,189 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

**Directional well information:**

Kick-off point 8661 ft  
Departure at shoe: 10512 ft  
Maximum dogleg: 14 °/100ft  
Inclination at shoe: 86.97 °

Tension is based on buoyed weight.

Neutral point: 7,515 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	19372	5.5	20.00	P-110	Buttress	9544	19372	4.653	160714
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	7189	11100	1.544	7189	12360	1.72	149	641.1	4.30 B

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801.538.5357  
FAX: 501.359.3940

Date: January 13, 2014  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 9544 ft, a mud weight of 14.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

*Engineering responsibility for use of this design will be that of the purchaser.*

BOPE REVIEW			
Well Name			
Dart 4-14-3-2WH to Ranch 16-10-3-3-2-Whrev API 4301352172			
Dart 4-14-3-2WH to Ranch 16-10-3-3-2-Whrev API 4301352172			
Casing Size (")	String 1	String 2	String 3
Setting Depth (TVD)	13 3/8	9 5/8	5 1/2
Previous Shoe Setting Depth (TVD)	1500	8520	9544
Max Mud Weight (ppg)	40	1500	8520
BOPE Proposed (psi)	8.33	10.5	14.5
Casing Internal Yield (psi)	500	5000	5000
Operators Max Anticipated Pressure (psi)	2730	5750	12360
	6948		14.0 ppg

Calculations		String 1	13 3/8 "
Max BHP [psi]		.052*Setting Depth*MW =	650
MASP (Gas) [psi]		Max BHP-(0.12*Setting Depth) =	470
MASP (Gas/Mud) [psi]		Max BHP-(0.22*Setting Depth) =	320
Pressure At Previous Shoe		Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	329
Required Casing/BOPE Test Pressure			1500 psi
*Max Pressure Allowed @ Previous Casing Shoe =			40 psi
			*Assumes 1psi/ft frac gradient
BOPE Adequate For Drilling And Setting Casing at Depth?			
		YES	Diverter, air and or fresh water system
		YES	
*Can Full Expected Pressure Be Held At Previous Shoe?			
			NO

Calculations		String 2	9 5/8 "
Max BHP [psi]		.052*Setting Depth*MW =	4652
MASP (Gas) [psi]		Max BHP-(0.12*Setting Depth) =	3630
MASP (Gas/Mud) [psi]		Max BHP-(0.22*Setting Depth) =	2778
Pressure At Previous Shoe		Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	3108
Required Casing/BOPE Test Pressure			4025 psi
*Max Pressure Allowed @ Previous Casing Shoe =			1500 psi
			*Assumes 1psi/ft frac gradient
BOPE Adequate For Drilling And Setting Casing at Depth?			
		YES	5M BOP, 2 ram preventers, annular preventer
		YES	
*Can Full Expected Pressure Be Held At Previous Shoe?			
			NO

Calculations		String 3	5 1/2 "
Max BHP [psi]		.052*Setting Depth*MW =	7196
MASP (Gas) [psi]		Max BHP-(0.12*Setting Depth) =	6051
MASP (Gas/Mud) [psi]		Max BHP-(0.22*Setting Depth) =	5096
Pressure At Previous Shoe		Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	6971
Required Casing/BOPE Test Pressure			5000 psi
*Max Pressure Allowed @ Previous Casing Shoe =			5750 psi
			*Assumes 1psi/ft frac gradient
BOPE Adequate For Drilling And Setting Casing at Depth?			
		NO	5M BOP, 2 ram preventers, annular preventer
		NO	expected 14 ppg → 4848 psi
*Can Full Expected Pressure Be Held At Previous Shoe?			
			YES

**NEWFIELD**



January 10, 2014

State of Utah  
Division of Oil, Gas & Mining  
ATTN: Brad Hill  
PO Box 145801  
Salt Lake City, UT 84114

**Newfield Exploration Company**

1001 17th Street | Suite 2000  
Denver, Colorado 80202  
PH 303-893-0102 | FAX 303-893-0103

RE: Ranch 16-10-3-3-2WH  
Township 3 South, Range 2 West, Sections 3 & 10  
Duchesne County, Utah

Dear Mr. Hill,

Newfield Production Company ("Newfield") proposes to drill the Ranch 16-10-3-3-2WH from a surface location of 250' FNL and 201' FWL of Section 14, T3S R2W, to a bottom hole location of 330' FNL and 660' FEL of Section 3, T3S R2W.

The Ranch 16-10-3-3-2WH is covered by Order No. 139-113, which requires no portion of the producing interval of the horizontal lateral be closer than 330' from the northern or southern section boundaries and no closer than 660' from the eastern or western section boundaries, and requires proper surface and sub-surface authorization be obtained when the surface location is located off of the drilling unit.

In compliance with the above referenced Order, the top of the uppermost producing zone of the Ranch 16-10-3-3-2WH is 330' FSL and 660' FEL of Section 10, T3S R2W. In the event a future recompletion outside of this setback is proposed, Newfield shall attempt to acquire consent from all the owners in Section 13, T3S R2W, and shall file the appropriate application with the State. The bottom hole location of the Ranch 16-10-3-3-2WH is 330' FNL and 660' FEL of Section 3, T3S R2W. In the event the horizontal lateral drifts east, Newfield will attempt to acquire consent from all owners in Sections 2 & 11, T3S R2W, and shall file the appropriate application with the State.

In further compliance of the above referenced Order, Newfield has obtained authorization from the surface owner of the drilling location, as is evidenced by the Affidavit of Easement, Right-of-Way and Surface Use Agreement attached to the APD. Newfield and its partners are the leasehold owners of the minerals underlying the surface location and all that portion of the wellbore of the Ranch 16-10-3-3-2WH lying outside the drilling unit.

Based on Newfield's compliance with the requirements of Order No. 139-113, Newfield respectfully requests the approval of our APD for the Ranch 16-10-3-3-2WH.

If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4466 or by email at [rmiller@newfield.com](mailto:rmiller@newfield.com). Your consideration of this matter is greatly appreciated.

Sincerely,

Robert N. Miller II  
Landman

**Newfield Production Company****16-10-3-3-2WH****Surface Hole Location: 250' FNL, 201' FWL, Section 14, T3S, R2W****Bottom Hole Location: 330' FNL, 660' FEL, Section 3, T3S, R2W****Duchesne County, UT****Drilling Program****1. Formation Tops**

Uinta	surface
Green River	3,776'
Garden Gulch member	6,714'
Uteland Butte member	8,902'
Lateral TD	9,544' TVD / 19,372' MD

**2. Depth to Oil, Gas, Water, or Minerals**

Base of moderately saline	2,418'	(water)
Green River	6,714' - 8,902'	(oil)
Uteland Butte member	8,902' - 9,544'	(oil)

**3. Pressure Control**Section      BOP Description

Surface      Diverter

Intermediate      The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 5M system.

Prod/Prod Liner      The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 5M system.

A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 psi will be used

**4. Casing**

Description	Interval		Weight (ppf)	Grade	Coups	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom (TVD/MD)							Burst	Collapse	Tension
Conductor 20	0'	60'	--	--	Weld	--	--	--	--	--	--
									--	--	--
Surface 13 3/8	0'	1,500'	54.5	J-55	STC	8.33	8.4	14	2,730	1,130	514,000
									2.89	2.63	6.29
Intermediate 9 5/8	0'	8,520'	40	N-80	BTC	10	10.5	16	5,750	3,090	916,000
		8,592'							1.17	1.33	2.69
Production 5 1/2	0'	9,544'	20	P-110	BTC	14	14.5	16	12,360	11,080	641,000
		19,372'							2.24	1.92	1.65

**Assumptions:**

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)  
 Intermediate casing MASP = (reservoir pressure) - (gas gradient)  
 Production casing MASP = (reservoir pressure) - (gas gradient)  
 Intermediate collapse calculations assume 50% evacuated  
 Maximum intermediate csg collapse load assumes loss of mud to a fluid level of 4,260'  
 Intermediate csg run from surface to 8,520' and will not experience full evacuation  
 Production csg run from surface to TD will isolate intermediate csg from production loads  
 Production csg withstands burst and collapse loads for anticipated production conditions  
 Surface & production collapse calcs assume fully evacuated casing w/ a gas gradient  
 All tension calculations assume air weight of casing  
 Gas gradient = 0.15 psi/ft

All casing shall be new.

All casing strings shall have a minimum of 1 centralizer on each of the bottom 3 joints.

**5. Cement**

Job	Hole Size	Fill	Slurry Description	ft <sup>3</sup>	OH excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
				sacks			
Conductor	24	60'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	66	15%	15.8	1.17
				57			
Surface Lead	17 1/2	1,000'	Varicem (Type III) + .125 lbs/sk Cello Flakes	1389	100%	11.0	3.33
				417			
Surface Tail	17 1/2	500'	Varicem (Type III) + .125 lbs/sk Cello Flakes	695	100%	13.0	1.9
				366			
Intermediate Lead	12 1/4	6,714'	HLC Premium - 35/65 Poz/Glass G + 10% bentonite	2418	15%	11.0	3.53
				685			
Intermediate Tail	12 1/4	1,878'	50/50 Poz/Class G + 1% bentonite	676	15%	14.0	1.29
				524			
Production Lead	8 3/4	10,780'	Elastiseal Foamed	3268	20%	14.5 - 17.3	1.84
				1776			
Production Tail	8 3/4	500'	Elastiseal Unfoamed	152	20%	17.3	1.84
				82			

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

Actual cement volumes for the intermediate casing string will be calculated from an open hole caliper log, plus 15% excess.

The 5.5" production string will be run from surface to TD and cemented to setback. The cement slurries will be adjusted for hole conditions and blend test results. The lateral will be cemented past the setback.

The wellbore will cross the heel setback @ 9,462' MD

The float collar will be @ 19,372' MD

This well will not be perforated or produced outside the legal setbacks.

**6. Type and Characteristics of Proposed Circulating Medium****Interval****Description**

Surface - 1,500'

An air and/or fresh water system will be utilized. If an air rig is used, the blooie line discharge may be less than 100' from the wellbore in order to minimize location size. The blooie line is not equipped with an automatic igniter. The air compressor may be located less than 100' from the well bore due to the low possibility of combustion with the air/dust mixture. Water will be on location to be used as kill fluid, if necessary.



1,500' - 8,592' A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and if conditions warrant, with barite.

Anticipated maximum mud weight is 10.5 ppg.

8,592' - TD One of two possible mud systems may be used depending on offset well performance on ongoing wells:  
A water based mud: Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and if conditions warrant, with barite.

-or-

A diesel based OBM system: with an oil to water ratio between 70/30 and 80/20. Emulsifiers and wetting agents will be used to maintain adequate mud properties. A water phase salinity will be maintained in the range of 25% using CaCl (Calcium Chloride). All cuttings will be dried and centrifuged so that they can be easily transferred to a lined cuttings pit with little to no free fluid on them. The cuttings will be mixed with fly ash prior to transportation to a location on Newfield owned surface. Once on Newfield owned surface, the cuttings will be treated with the previously approved FIRMUS process and used as a construction material on future location and/or roads on Newfield owned surface. The cuttings may also be transported to a state approved disposal facility.

Anticipated maximum mud weight is 14.5 ppg.

## 7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run from KOP to the base of the surface casing. A compensated neutron/formation density log will be run from TD to the top of the Garden Gulch formation. A cement bond log will be run from KOP to the cement top behind the production casing and or intermediate casing.

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

## 8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by a 0.73 psi/ft gradient.

$$9,544' \times 0.73 \text{ psi/ft} = 6948 \text{ psi}$$

No abnormal temperature is expected. No H<sub>2</sub>S is expected.

## 9. Other Aspects

The lateral of this well will target the Uteland Butte member of the Green River formation. After setting 9-5/8" casing, an 8-3/4" vertical hole will be drilled to a kick off point of 8,660'. Directional tools will then be used to build to 86.97 degrees inclination. The lateral will be drilled to the bottomhole location shown on the plat. A 5-1/2" longstring will be run from surface to TD and cemented in place.

Newfield requests the following variances from Onshore Order #2:

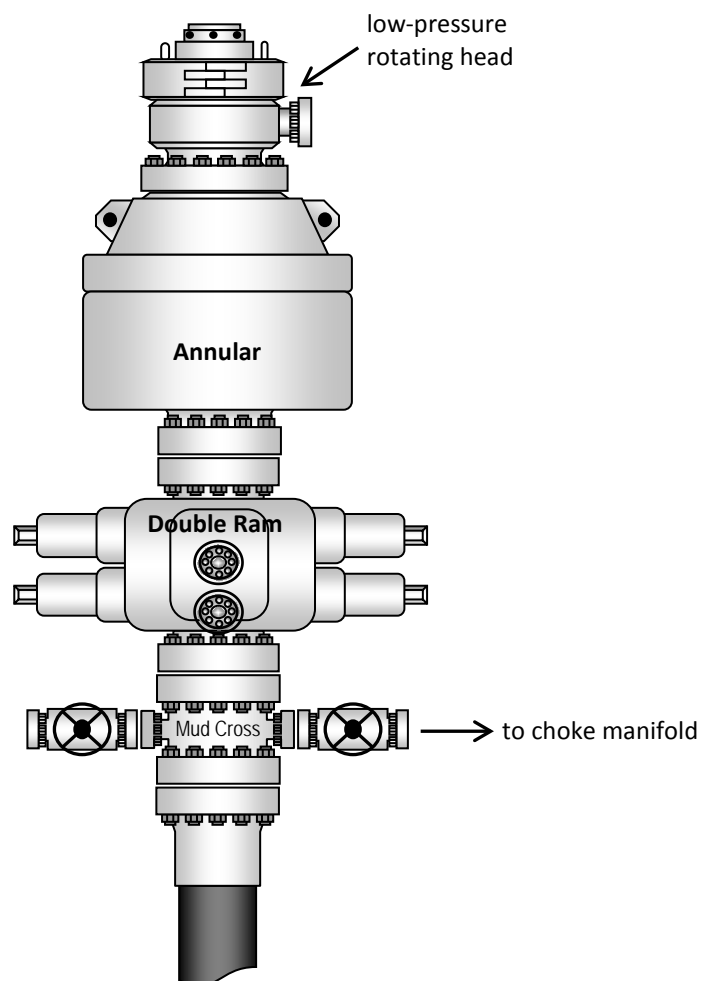
- Variance from Onshore Order #2, III.E.1  
Refer to Newfield Production Company Standard Operating Practices "Ute Tribal Green River Development Program" paragraph 9.0

If oil based mud (OBM) is used and If Newfield owns the surface rights on the same drilling site at a location where construction is desired, the cuttings may be used for construction by a Firmus® process at that location. Otherwise, after the cuttings have been made safe for transport as described in paragraph 6, they will be transported to another location on which Newfield owns surface rights and there mixed, as part of a Firmus® process, with at least one additional chemical that will convert them to a temporarily uncured cementitious mixture that will be placed and shaped into a temporary desired final structure that will spontaneously harden within seven days after placement to form the desired structure. Samples of the temporary desired final structure may be taken for testing as described below (after the samples have hardened), or samples of the starting pretreated cuttings and mud will be taken during the construction and later mixed in a laboratory, molded, and cured to simulate the final structure as well as reasonably possible. Either these laboratory-made simulations of the final structure or samples of the temporary mixture itself after hardening, will be mechanically tested directly to determine their unconfined compressive strength and their hydraulic conductivity. Leachates of the mechanically tested structures themselves or of finer particles made by crushing and size-grading of the mechanically tested structures themselves to a specified particle size range will be analyzed, according to specified methods, for their contents of arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, zinc, benzene, total petroleum hydrocarbons (TPH), and chlorides, and the pH of these leachates will also be measured. The results of all these tests will be reported by Newfield to UDOGM at intervals as requested, along with the latitude and longitude (or other comparable location data) of the site of the useful constructions built.

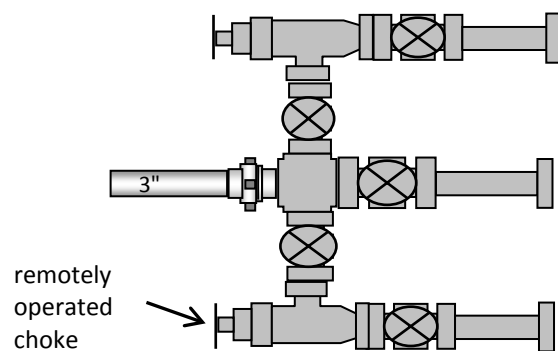
Water flows in the surface hole are likely. If water flows are encountered while drilling the mud weight will be increased to kill the water flow. The cement density will be adjusted to meet or exceed the mud weight needed to kill the water flow. If cement fails to reach the surface or falls back, a top job will be performed to bring cement to surface.

A diverter will be used to drill the surface hole interval. Any waterflows that are encountered will be reported to UDOGM.

**Typical 5M BOP stack configuration**



**Typical 5M choke manifold configuration**

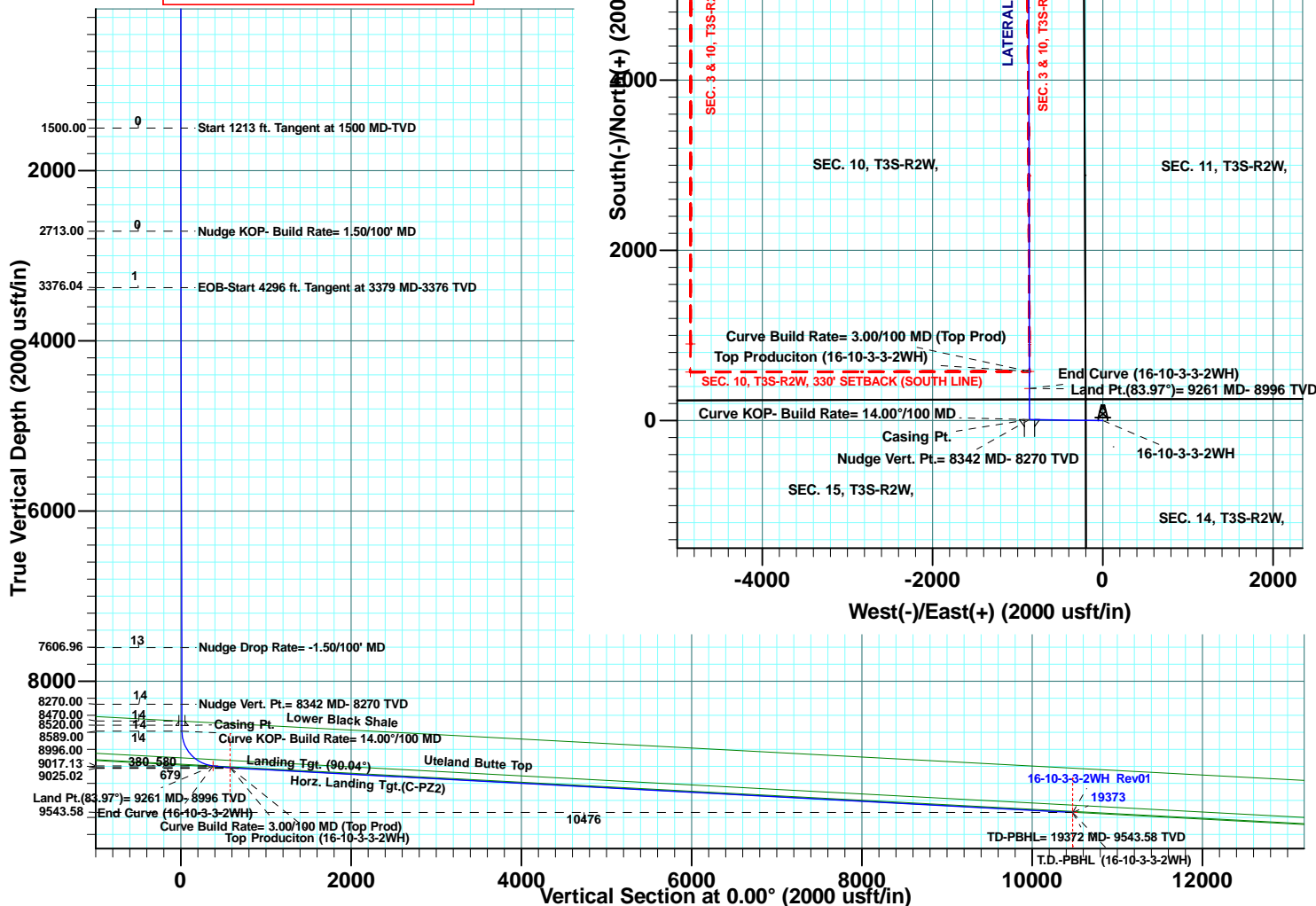


**LEAM Drilling Systems, LLC.**  
**FOR**  
**NEWFIELD EXPLORATION ROCKY MOUNTAINS**  
**WELL: 16-10-3-3-2WH (PLAN: REV01)**  
**SEC. 10, T3S-R2W, DUCHESNE COUNTY, UTAH**  
**RIG NAME: RIG (KB= 28')**  
**JANUARY 06, 2014 -- WELL PLAN PLOT**

WELL DETAILS: 16-10-3-3-2WH  
 Ground Level: 5416.00  
 +N/-S +E/-W Northing Easting Latitude Longitude  
 0.00 0.00 7255214.47 2035323.8340° 13° 43.930 N 110° 5' 7.930 W

PROJECT DETAILS: DUCHESNE COUNTY, UT (NAD 83)  
 Geodetic System: US State Plane 1983  
 Ellipsoid: GRS 1980  
 Zone: Utah Central Zone  
 System Datum: Mean Sea Level

SITE DETAILS: CENTRAL BASIN (NAD 83)  
 Site Centre Latitude: 40° 13' 50.461 N  
 Longitude: 110° 5' 34.149 W  
 Positional Uncertainty: 0.00  
 Convergence: 0.90  
 Local North: True



↑ M  
 Azimuths to True North  
 Magnetic North: 11.11°  
 Magnetic Field  
 Strength: 52024.6snT  
 Dip Angle: 65.86°  
 Date: 1/6/2014  
 Model: BGM2013

Plan: 16-10-3-3-2WH Rev01 (16-10-3-3-2WH)  
 Created By: LEAM DRILLING SYSTEMS, LLC Date: 16:23, January 06 2014  
 Checked: \_\_\_\_\_ Date: \_\_\_\_\_  
 Reviewed: \_\_\_\_\_ Date: \_\_\_\_\_  
 Approved: \_\_\_\_\_ Date: \_\_\_\_\_



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH		
<b>Design:</b>	16-10-3-3-2WH Rev01		

<b>Project</b>	DUCHESNE COUNTY, UT (NAD 83),		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		

<b>Site</b>	CENTRAL BASIN (NAD 83)		
<b>Site Position:</b>		<b>Northing:</b>	7,255,843.21 usft
<b>From:</b>	Map	<b>Easting:</b>	2,033,280.24 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	20 "
		<b>Latitude:</b>	40° 13' 50.461 N
		<b>Longitude:</b>	110° 5' 34.149 W
		<b>Grid Convergence:</b>	0.90 °

<b>Well</b>	16-10-3-3-2WH		
<b>Well Position</b>	<b>+N/-S</b>	-660.81 usft	<b>Northing:</b> 7,255,214.48 usft
	<b>+E/-W</b>	2,033.44 usft	<b>Easting:</b> 2,035,323.82 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	5,444.00 usft
		<b>Latitude:</b>	40° 13' 43.930 N
		<b>Longitude:</b>	110° 5' 7.930 W
		<b>Ground Level:</b>	5,416.00 usft

<b>Wellbore</b>	16-10-3-3-2WH		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>
	BGGM2013	1/6/2014	11.11
			<b>Dip Angle (°)</b>
			65.86
			<b>Field Strength (nT)</b>
			52,025

<b>Design</b>	16-10-3-3-2WH Rev01		
<b>Audit Notes:</b>			
<b>Version:</b>	Rev01	<b>Phase:</b>	PLAN
		<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>
	0.00	0.00	0.00
		<b>Direction (°)</b>	0.00

<b>Plan Sections</b>										
<b>Measured</b>	<b>Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
	2,713.00	0.00	0.00	2,713.00	0.00	0.00	0.00	0.00	0.00	0.00
	3,379.41	10.00	270.90	3,376.04	0.91	-57.98	1.50	1.50	0.00	270.90
	7,675.56	10.00	270.90	7,606.96	12.64	-803.62	0.00	0.00	0.00	0.00
	8,341.97	0.00	0.00	8,270.00	13.55	-861.60	1.50	-1.50	0.00	180.00
	8,541.97	0.00	0.00	8,470.00	13.55	-861.60	0.00	0.00	0.00	0.00
	8,591.97	0.00	0.00	8,520.00	13.55	-861.60	0.00	0.00	0.00	0.00
	8,660.97	0.00	0.00	8,589.00	13.55	-861.60	0.00	0.00	0.00	0.00
	9,260.77	83.97	359.92	8,996.00	379.82	-862.11	14.00	14.00	0.00	359.92
	9,461.87	83.97	359.92	9,017.13	579.81	-862.39	0.00	0.00	0.00	0.00
	9,561.87	86.97	359.92	9,025.02	679.48	-862.53	3.00	3.00	0.00	0.00
	19,372.04	86.97	359.92	9,543.58	10,475.93	-876.21	0.00	0.00	0.00	0.00 T.D.-PBHL (16-10-3)



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH		
<b>Design:</b>	16-10-3-3-2WH Rev01		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>SEC. 10, T3S-R2W, 330' SETBACK (SOUTH LINE) - SEC. 14, T3S-R2W,</b>									
59.00	0.00	0.00	59.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>SEC. 10, T3S-R2W,</b>									
78.00	0.00	0.00	78.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>SEC. 3 &amp; 10, T3S-R2W, 660' SETBACK (EAST LINE) - SEC. 3 &amp; 10, T3S-R2W, 660' SETBACK (WEST LINE) - SEC. 3, T3S-</b>									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start 1213 ft. Tangent at 1500 MD-TVD</b>									
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,713.00	0.00	0.00	2,713.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Nudge KOP- Build Rate= 1.50/100' MD</b>									
2,800.00	1.31	270.90	2,799.99	0.02	-0.99	0.02	1.50	1.50	0.00
2,900.00	2.81	270.90	2,899.93	0.07	-4.58	0.07	1.50	1.50	0.00
3,000.00	4.31	270.90	2,999.73	0.17	-10.78	0.17	1.50	1.50	0.00
3,100.00	5.81	270.90	3,099.34	0.31	-19.59	0.31	1.50	1.50	0.00
3,200.00	7.31	270.90	3,198.68	0.49	-31.00	0.49	1.50	1.50	0.00
3,300.00	8.81	270.90	3,297.69	0.71	-45.01	0.71	1.50	1.50	0.00
3,379.41	10.00	270.90	3,376.04	0.91	-57.98	0.91	1.50	1.50	0.00
<b>EOB-Start 4296 ft. Tangent at 3379 MD-3376 TVD</b>									
3,400.00	10.00	270.90	3,396.31	0.97	-61.55	0.97	0.00	0.00	0.00
3,500.00	10.00	270.90	3,494.79	1.24	-78.91	1.24	0.00	0.00	0.00
3,600.00	10.00	270.90	3,593.28	1.51	-96.26	1.51	0.00	0.00	0.00
3,700.00	10.00	270.90	3,691.76	1.79	-113.62	1.79	0.00	0.00	0.00
3,800.00	10.00	270.90	3,790.24	2.06	-130.98	2.06	0.00	0.00	0.00
3,900.00	10.00	270.90	3,888.72	2.33	-148.33	2.33	0.00	0.00	0.00
4,000.00	10.00	270.90	3,987.20	2.61	-165.69	2.61	0.00	0.00	0.00



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH		
<b>Design:</b>	16-10-3-3-2WH Rev01		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,100.00	10.00	270.90	4,085.69	2.88	-183.04	2.88	0.00	0.00	0.00
4,200.00	10.00	270.90	4,184.17	3.15	-200.40	3.15	0.00	0.00	0.00
4,300.00	10.00	270.90	4,282.65	3.42	-217.76	3.42	0.00	0.00	0.00
4,400.00	10.00	270.90	4,381.13	3.70	-235.11	3.70	0.00	0.00	0.00
4,500.00	10.00	270.90	4,479.61	3.97	-252.47	3.97	0.00	0.00	0.00
4,600.00	10.00	270.90	4,578.10	4.24	-269.82	4.24	0.00	0.00	0.00
4,700.00	10.00	270.90	4,676.58	4.52	-287.18	4.52	0.00	0.00	0.00
4,800.00	10.00	270.90	4,775.06	4.79	-304.54	4.79	0.00	0.00	0.00
4,900.00	10.00	270.90	4,873.54	5.06	-321.89	5.06	0.00	0.00	0.00
5,000.00	10.00	270.90	4,972.02	5.34	-339.25	5.34	0.00	0.00	0.00
5,100.00	10.00	270.90	5,070.50	5.61	-356.61	5.61	0.00	0.00	0.00
5,200.00	10.00	270.90	5,168.99	5.88	-373.96	5.88	0.00	0.00	0.00
5,300.00	10.00	270.90	5,267.47	6.15	-391.32	6.15	0.00	0.00	0.00
5,400.00	10.00	270.90	5,365.95	6.43	-408.67	6.43	0.00	0.00	0.00
5,500.00	10.00	270.90	5,464.43	6.70	-426.03	6.70	0.00	0.00	0.00
5,600.00	10.00	270.90	5,562.91	6.97	-443.39	6.97	0.00	0.00	0.00
5,700.00	10.00	270.90	5,661.40	7.25	-460.74	7.25	0.00	0.00	0.00
5,800.00	10.00	270.90	5,759.88	7.52	-478.10	7.52	0.00	0.00	0.00
5,900.00	10.00	270.90	5,858.36	7.79	-495.45	7.79	0.00	0.00	0.00
6,000.00	10.00	270.90	5,956.84	8.06	-512.81	8.06	0.00	0.00	0.00
6,100.00	10.00	270.90	6,055.32	8.34	-530.17	8.34	0.00	0.00	0.00
6,200.00	10.00	270.90	6,153.81	8.61	-547.52	8.61	0.00	0.00	0.00
6,300.00	10.00	270.90	6,252.29	8.88	-564.88	8.88	0.00	0.00	0.00
6,400.00	10.00	270.90	6,350.77	9.16	-582.23	9.16	0.00	0.00	0.00
6,500.00	10.00	270.90	6,449.25	9.43	-599.59	9.43	0.00	0.00	0.00
6,600.00	10.00	270.90	6,547.73	9.70	-616.95	9.70	0.00	0.00	0.00
6,700.00	10.00	270.90	6,646.22	9.98	-634.30	9.98	0.00	0.00	0.00
6,800.00	10.00	270.90	6,744.70	10.25	-651.66	10.25	0.00	0.00	0.00
6,900.00	10.00	270.90	6,843.18	10.52	-669.01	10.52	0.00	0.00	0.00
7,000.00	10.00	270.90	6,941.66	10.79	-686.37	10.79	0.00	0.00	0.00
7,100.00	10.00	270.90	7,040.14	11.07	-703.73	11.07	0.00	0.00	0.00
7,200.00	10.00	270.90	7,138.63	11.34	-721.08	11.34	0.00	0.00	0.00
7,300.00	10.00	270.90	7,237.11	11.61	-738.44	11.61	0.00	0.00	0.00
7,400.00	10.00	270.90	7,335.59	11.89	-755.80	11.89	0.00	0.00	0.00
7,500.00	10.00	270.90	7,434.07	12.16	-773.15	12.16	0.00	0.00	0.00
7,600.00	10.00	270.90	7,532.55	12.43	-790.51	12.43	0.00	0.00	0.00
7,675.56	10.00	270.90	7,606.96	12.64	-803.62	12.64	0.00	0.00	0.00
<b>Nudge Drop Rate= -1.50/100' MD</b>									
7,700.00	9.63	270.90	7,631.05	12.70	-807.79	12.70	1.50	-1.50	0.00
7,800.00	8.13	270.90	7,729.85	12.95	-823.22	12.95	1.50	-1.50	0.00
7,900.00	6.63	270.90	7,829.02	13.15	-836.06	13.15	1.50	-1.50	0.00
8,000.00	5.13	270.90	7,928.49	13.31	-846.30	13.31	1.50	-1.50	0.00
8,100.00	3.63	270.90	8,028.19	13.43	-853.94	13.43	1.50	-1.50	0.00
8,200.00	2.13	270.90	8,128.06	13.51	-858.96	13.51	1.50	-1.50	0.00
8,300.00	0.63	270.90	8,228.03	13.55	-861.37	13.55	1.50	-1.50	0.00
8,341.97	0.00	0.00	8,270.00	13.55	-861.60	13.55	1.50	-1.50	212.29
<b>Nudge Vert. Pt.= 8342 MD- 8270 TVD</b>									
8,400.00	0.00	0.00	8,328.03	13.55	-861.60	13.55	0.00	0.00	0.00
8,500.00	0.00	0.00	8,428.03	13.55	-861.60	13.55	0.00	0.00	0.00
8,541.69	0.00	0.00	8,469.72	13.55	-861.60	13.55	0.00	0.00	0.00
<b>Lower Black Shale</b>									
8,541.97	0.00	0.00	8,470.00	13.55	-861.60	13.55	0.00	0.00	0.00





## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH		
<b>Design:</b>	16-10-3-3-2WH Rev01		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>Start 50 ft. Tangent at 8542 MD- 8470 TVD</b>									
8,591.97	0.00	0.00	8,520.00	13.55	-861.60	13.55	0.00	0.00	0.00
<b>Start 69 ft. Tangent at 8592 MD- 8520 TVD - Casing Pt.</b>									
8,600.00	0.00	0.00	8,528.03	13.55	-861.60	13.55	0.00	0.00	0.00
8,660.97	0.00	0.00	8,589.00	13.55	-861.60	13.55	0.00	0.00	0.00
<b>Curve KOP- Build Rate= 14.00°/100 MD</b>									
8,675.00	1.96	359.92	8,603.03	13.79	-861.60	13.79	14.00	14.00	0.00
8,700.00	5.46	359.92	8,627.97	15.41	-861.60	15.41	14.00	14.00	0.00
8,725.00	8.96	359.92	8,652.77	18.55	-861.61	18.55	14.00	14.00	0.00
8,750.00	12.46	359.92	8,677.33	23.20	-861.61	23.20	14.00	14.00	0.00
8,775.00	15.96	359.92	8,701.56	29.33	-861.62	29.33	14.00	14.00	0.00
8,800.00	19.46	359.92	8,725.37	36.94	-861.63	36.94	14.00	14.00	0.00
8,825.00	22.96	359.92	8,748.67	45.98	-861.65	45.98	14.00	14.00	0.00
8,850.00	26.46	359.92	8,771.38	56.43	-861.66	56.43	14.00	14.00	0.00
8,875.00	29.96	359.92	8,793.41	68.25	-861.68	68.25	14.00	14.00	0.00
8,900.00	33.46	359.92	8,814.67	81.39	-861.69	81.39	14.00	14.00	0.00
8,925.00	36.96	359.92	8,835.09	95.80	-861.71	95.80	14.00	14.00	0.00
8,950.00	40.46	359.92	8,854.60	111.44	-861.74	111.44	14.00	14.00	0.00
8,975.00	43.96	359.92	8,873.11	128.23	-861.76	128.23	14.00	14.00	0.00
9,000.00	47.46	359.92	8,890.56	146.13	-861.79	146.13	14.00	14.00	0.00
9,025.00	50.96	359.92	8,906.89	165.05	-861.81	165.05	14.00	14.00	0.00
9,031.60	51.89	359.92	8,911.01	170.21	-861.82	170.21	14.00	14.00	0.00
<b>Uteland Butte Top</b>									
9,050.00	54.46	359.92	8,922.04	184.94	-861.84	184.94	14.00	14.00	0.00
9,075.00	57.96	359.92	8,935.94	205.71	-861.87	205.71	14.00	14.00	0.00
9,100.00	61.46	359.92	8,948.54	227.30	-861.90	227.30	14.00	14.00	0.00
9,125.00	64.96	359.92	8,959.81	249.61	-861.93	249.61	14.00	14.00	0.00
9,150.00	68.46	359.92	8,969.69	272.57	-861.96	272.57	14.00	14.00	0.00
9,175.00	71.96	359.92	8,978.15	296.09	-861.99	296.09	14.00	14.00	0.00
9,200.00	75.46	359.92	8,985.16	320.08	-862.03	320.08	14.00	14.00	0.00
9,225.00	78.96	359.92	8,990.69	344.46	-862.06	344.46	14.00	14.00	0.00
9,250.00	82.46	359.92	8,994.73	369.13	-862.10	369.13	14.00	14.00	0.00
9,260.77	83.97	359.92	8,996.00	379.82	-862.11	379.82	14.00	14.00	0.00
<b>Land Pt.(83.97°)= 9261 MD- 8996 TVD</b>									
9,260.78	83.97	359.92	8,996.00	379.84	-862.11	379.84	0.00	0.00	0.00
<b>End Curve (16-10-3-3-2WH)</b>									
9,262.77	83.97	359.92	8,996.21	381.81	-862.11	381.81	0.00	0.00	0.00
<b>Landing Tgt. (90.04°)</b>									
9,300.00	83.97	359.92	9,000.12	418.84	-862.17	418.84	0.00	0.00	0.00
9,400.00	83.97	359.92	9,010.63	518.28	-862.30	518.28	0.00	0.00	0.00
9,453.58	83.97	359.92	9,016.25	571.56	-862.38	571.56	0.00	0.00	0.00
<b>Horz. Landing Tgt.(C-PZ2)</b>									
9,461.87	83.97	359.92	9,017.13	579.81	-862.39	579.81	0.00	0.00	0.00
<b>Curve Build Rate= 3.00/100 MD (Top Prod) - Top Production (16-10-3-3-2WH)</b>									
9,500.00	85.11	359.92	9,020.75	617.77	-862.44	617.77	3.00	3.00	0.00
9,561.87	86.97	359.92	9,025.02	679.48	-862.53	679.48	3.00	3.00	0.00
<b>Start 9810 ft. Tangent at 9562 MD- 9025 TVD</b>									
9,600.00	86.97	359.92	9,027.04	717.56	-862.58	717.56	0.00	0.00	0.00
9,700.00	86.97	359.92	9,032.32	817.42	-862.72	817.42	0.00	0.00	0.00
9,800.00	86.97	359.92	9,037.61	917.28	-862.86	917.28	0.00	0.00	0.00
9,900.00	86.97	359.92	9,042.90	1,017.14	-863.00	1,017.14	0.00	0.00	0.00



## Planning Report



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<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH		
<b>Design:</b>	16-10-3-3-2WH Rev01		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,000.00	86.97	359.92	9,048.18	1,117.00	-863.14	1,117.00	0.00	0.00	0.00
10,100.00	86.97	359.92	9,053.47	1,216.86	-863.28	1,216.86	0.00	0.00	0.00
10,200.00	86.97	359.92	9,058.75	1,316.72	-863.42	1,316.72	0.00	0.00	0.00
10,300.00	86.97	359.92	9,064.04	1,416.58	-863.56	1,416.58	0.00	0.00	0.00
10,400.00	86.97	359.92	9,069.33	1,516.44	-863.70	1,516.44	0.00	0.00	0.00
10,500.00	86.97	359.92	9,074.61	1,616.30	-863.84	1,616.30	0.00	0.00	0.00
10,600.00	86.97	359.92	9,079.90	1,716.16	-863.98	1,716.16	0.00	0.00	0.00
10,700.00	86.97	359.92	9,085.18	1,816.02	-864.12	1,816.02	0.00	0.00	0.00
10,800.00	86.97	359.92	9,090.47	1,915.88	-864.26	1,915.88	0.00	0.00	0.00
10,900.00	86.97	359.92	9,095.75	2,015.74	-864.40	2,015.74	0.00	0.00	0.00
11,000.00	86.97	359.92	9,101.04	2,115.60	-864.54	2,115.60	0.00	0.00	0.00
11,100.00	86.97	359.92	9,106.33	2,215.46	-864.67	2,215.46	0.00	0.00	0.00
11,200.00	86.97	359.92	9,111.61	2,315.32	-864.81	2,315.32	0.00	0.00	0.00
11,300.00	86.97	359.92	9,116.90	2,415.18	-864.95	2,415.18	0.00	0.00	0.00
11,400.00	86.97	359.92	9,122.18	2,515.04	-865.09	2,515.04	0.00	0.00	0.00
11,500.00	86.97	359.92	9,127.47	2,614.90	-865.23	2,614.90	0.00	0.00	0.00
11,600.00	86.97	359.92	9,132.76	2,714.77	-865.37	2,714.77	0.00	0.00	0.00
11,700.00	86.97	359.92	9,138.04	2,814.63	-865.51	2,814.63	0.00	0.00	0.00
11,800.00	86.97	359.92	9,143.33	2,914.49	-865.65	2,914.49	0.00	0.00	0.00
11,900.00	86.97	359.92	9,148.61	3,014.35	-865.79	3,014.35	0.00	0.00	0.00
12,000.00	86.97	359.92	9,153.90	3,114.21	-865.93	3,114.21	0.00	0.00	0.00
12,100.00	86.97	359.92	9,159.19	3,214.07	-866.07	3,214.07	0.00	0.00	0.00
12,200.00	86.97	359.92	9,164.47	3,313.93	-866.21	3,313.93	0.00	0.00	0.00
12,300.00	86.97	359.92	9,169.76	3,413.79	-866.35	3,413.79	0.00	0.00	0.00
12,400.00	86.97	359.92	9,175.04	3,513.65	-866.49	3,513.65	0.00	0.00	0.00
12,500.00	86.97	359.92	9,180.33	3,613.51	-866.63	3,613.51	0.00	0.00	0.00
12,600.00	86.97	359.92	9,185.61	3,713.37	-866.77	3,713.37	0.00	0.00	0.00
12,700.00	86.97	359.92	9,190.90	3,813.23	-866.91	3,813.23	0.00	0.00	0.00
12,800.00	86.97	359.92	9,196.19	3,913.09	-867.04	3,913.09	0.00	0.00	0.00
12,900.00	86.97	359.92	9,201.47	4,012.95	-867.18	4,012.95	0.00	0.00	0.00
13,000.00	86.97	359.92	9,206.76	4,112.81	-867.32	4,112.81	0.00	0.00	0.00
13,100.00	86.97	359.92	9,212.04	4,212.67	-867.46	4,212.67	0.00	0.00	0.00
13,200.00	86.97	359.92	9,217.33	4,312.53	-867.60	4,312.53	0.00	0.00	0.00
13,300.00	86.97	359.92	9,222.62	4,412.39	-867.74	4,412.39	0.00	0.00	0.00
13,400.00	86.97	359.92	9,227.90	4,512.25	-867.88	4,512.25	0.00	0.00	0.00
13,500.00	86.97	359.92	9,233.19	4,612.11	-868.02	4,612.11	0.00	0.00	0.00
13,600.00	86.97	359.92	9,238.47	4,711.97	-868.16	4,711.97	0.00	0.00	0.00
13,700.00	86.97	359.92	9,243.76	4,811.83	-868.30	4,811.83	0.00	0.00	0.00
13,800.00	86.97	359.92	9,249.05	4,911.69	-868.44	4,911.69	0.00	0.00	0.00
13,900.00	86.97	359.92	9,254.33	5,011.55	-868.58	5,011.55	0.00	0.00	0.00
14,000.00	86.97	359.92	9,259.62	5,111.41	-868.72	5,111.41	0.00	0.00	0.00
14,100.00	86.97	359.92	9,264.90	5,211.27	-868.86	5,211.27	0.00	0.00	0.00
14,200.00	86.97	359.92	9,270.19	5,311.13	-869.00	5,311.13	0.00	0.00	0.00
14,300.00	86.97	359.92	9,275.47	5,410.99	-869.14	5,410.99	0.00	0.00	0.00
14,400.00	86.97	359.92	9,280.76	5,510.85	-869.28	5,510.85	0.00	0.00	0.00
14,500.00	86.97	359.92	9,286.05	5,610.71	-869.42	5,610.71	0.00	0.00	0.00
14,600.00	86.97	359.92	9,291.33	5,710.57	-869.55	5,710.57	0.00	0.00	0.00
14,700.00	86.97	359.92	9,296.62	5,810.43	-869.69	5,810.43	0.00	0.00	0.00
14,800.00	86.97	359.92	9,301.90	5,910.29	-869.83	5,910.29	0.00	0.00	0.00
14,900.00	86.97	359.92	9,307.19	6,010.15	-869.97	6,010.15	0.00	0.00	0.00
15,000.00	86.97	359.92	9,312.48	6,110.01	-870.11	6,110.01	0.00	0.00	0.00
15,100.00	86.97	359.92	9,317.76	6,209.87	-870.25	6,209.87	0.00	0.00	0.00



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH		
<b>Design:</b>	16-10-3-3-2WH Rev01		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,200.00	86.97	359.92	9,323.05	6,309.73	-870.39	6,309.73	0.00	0.00	0.00
15,300.00	86.97	359.92	9,328.33	6,409.59	-870.53	6,409.59	0.00	0.00	0.00
15,400.00	86.97	359.92	9,333.62	6,509.45	-870.67	6,509.45	0.00	0.00	0.00
15,500.00	86.97	359.92	9,338.91	6,609.31	-870.81	6,609.31	0.00	0.00	0.00
15,600.00	86.97	359.92	9,344.19	6,709.17	-870.95	6,709.17	0.00	0.00	0.00
15,700.00	86.97	359.92	9,349.48	6,809.03	-871.09	6,809.03	0.00	0.00	0.00
15,800.00	86.97	359.92	9,354.76	6,908.89	-871.23	6,908.89	0.00	0.00	0.00
15,900.00	86.97	359.92	9,360.05	7,008.75	-871.37	7,008.75	0.00	0.00	0.00
16,000.00	86.97	359.92	9,365.33	7,108.61	-871.51	7,108.61	0.00	0.00	0.00
16,100.00	86.97	359.92	9,370.62	7,208.47	-871.65	7,208.47	0.00	0.00	0.00
16,200.00	86.97	359.92	9,375.91	7,308.33	-871.79	7,308.33	0.00	0.00	0.00
16,300.00	86.97	359.92	9,381.19	7,408.19	-871.92	7,408.19	0.00	0.00	0.00
16,400.00	86.97	359.92	9,386.48	7,508.05	-872.06	7,508.05	0.00	0.00	0.00
16,500.00	86.97	359.92	9,391.76	7,607.91	-872.20	7,607.91	0.00	0.00	0.00
16,600.00	86.97	359.92	9,397.05	7,707.77	-872.34	7,707.77	0.00	0.00	0.00
16,700.00	86.97	359.92	9,402.34	7,807.63	-872.48	7,807.63	0.00	0.00	0.00
16,800.00	86.97	359.92	9,407.62	7,907.49	-872.62	7,907.49	0.00	0.00	0.00
16,900.00	86.97	359.92	9,412.91	8,007.35	-872.76	8,007.35	0.00	0.00	0.00
17,000.00	86.97	359.92	9,418.19	8,107.21	-872.90	8,107.21	0.00	0.00	0.00
17,100.00	86.97	359.92	9,423.48	8,207.07	-873.04	8,207.07	0.00	0.00	0.00
17,200.00	86.97	359.92	9,428.77	8,306.93	-873.18	8,306.93	0.00	0.00	0.00
17,300.00	86.97	359.92	9,434.05	8,406.79	-873.32	8,406.79	0.00	0.00	0.00
17,400.00	86.97	359.92	9,439.34	8,506.65	-873.46	8,506.65	0.00	0.00	0.00
17,500.00	86.97	359.92	9,444.62	8,606.51	-873.60	8,606.51	0.00	0.00	0.00
17,600.00	86.97	359.92	9,449.91	8,706.37	-873.74	8,706.37	0.00	0.00	0.00
17,700.00	86.97	359.92	9,455.19	8,806.23	-873.88	8,806.23	0.00	0.00	0.00
17,800.00	86.97	359.92	9,460.48	8,906.09	-874.02	8,906.09	0.00	0.00	0.00
17,900.00	86.97	359.92	9,465.77	9,005.95	-874.16	9,005.95	0.00	0.00	0.00
18,000.00	86.97	359.92	9,471.05	9,105.81	-874.30	9,105.81	0.00	0.00	0.00
18,100.00	86.97	359.92	9,476.34	9,205.67	-874.43	9,205.67	0.00	0.00	0.00
18,200.00	86.97	359.92	9,481.62	9,305.53	-874.57	9,305.53	0.00	0.00	0.00
18,300.00	86.97	359.92	9,486.91	9,405.39	-874.71	9,405.39	0.00	0.00	0.00
18,400.00	86.97	359.92	9,492.20	9,505.25	-874.85	9,505.25	0.00	0.00	0.00
18,500.00	86.97	359.92	9,497.48	9,605.11	-874.99	9,605.11	0.00	0.00	0.00
18,600.00	86.97	359.92	9,502.77	9,704.97	-875.13	9,704.97	0.00	0.00	0.00
18,700.00	86.97	359.92	9,508.05	9,804.83	-875.27	9,804.83	0.00	0.00	0.00
18,800.00	86.97	359.92	9,513.34	9,904.69	-875.41	9,904.69	0.00	0.00	0.00
18,825.86	86.97	359.92	9,514.71	9,930.51	-875.45	9,930.51	0.00	0.00	0.00
<b>SEC. 3, T3S-R2W, 330' SETBACK (NORTH LINE)</b>									
18,900.00	86.97	359.92	9,518.63	10,004.55	-875.55	10,004.55	0.00	0.00	0.00
19,000.00	86.97	359.92	9,523.91	10,104.41	-875.69	10,104.41	0.00	0.00	0.00
19,100.00	86.97	359.92	9,529.20	10,204.27	-875.83	10,204.27	0.00	0.00	0.00
19,200.00	86.97	359.92	9,534.48	10,304.13	-875.97	10,304.13	0.00	0.00	0.00
19,300.00	86.97	359.92	9,539.77	10,403.99	-876.11	10,403.99	0.00	0.00	0.00
19,372.04	86.97	359.92	9,543.58	10,475.93	-876.21	10,475.93	0.00	0.00	0.00
<b>TD-PBHL= 19372 MD- 9543.58 TVD - T.D.-PBHL (16-10-3-3-2WH)</b>									



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH		
<b>Design:</b>	16-10-3-3-2WH Rev01		

## Design Targets

## Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SEC. 3, T3S-R2W, 33	0.00	0.00	0.00	10,428.60	-4,854.52	7,265,565.00	2,030,305.00	40° 15' 26.988 N	110° 6' 10.549 W
- plan misses target center by 10325.25usft at 18825.85usft MD (9514.71 TVD, 9930.51 N, -875.45 E)									
- Polygon									
Point 1			0.00	0.00	0.00	7,265,565.00	2,030,305.00		
Point 2			0.00	8.45	667.22	7,265,584.00	2,030,972.00		
Point 3			0.00	25.45	1,995.65	7,265,622.00	2,032,300.00		
Point 4			0.00	52.47	3,976.33	7,265,680.34	2,034,280.00		
Point 5			0.00	52.47	3,976.33	7,265,680.34	2,034,280.00		
Point 6			0.00	25.45	1,995.65	7,265,622.00	2,032,300.00		
Point 7			0.00	8.45	667.22	7,265,584.00	2,030,972.00		
Point 8			0.00	0.00	0.00	7,265,565.00	2,030,305.00		
SEC. 10, T3S-R2W, 3	0.00	0.00	0.00	570.00	-4,844.42	7,255,707.80	2,030,471.00	40° 13' 49.558 N	110° 6' 10.394 W
- plan misses target center by 4877.84usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			0.00	0.00	0.00	7,255,707.80	2,030,471.00		
Point 2			0.00	4.88	2,012.33	7,255,744.50	2,032,483.00		
Point 3			0.00	9.64	3,981.65	7,255,780.40	2,034,452.00		
Point 4			0.00	9.64	3,981.65	7,255,780.40	2,034,452.00		
Point 5			0.00	4.88	2,012.33	7,255,744.50	2,032,483.00		
Point 6			0.00	0.00	0.00	7,255,707.80	2,030,471.00		
SEC. 14, T3S-R2W,	0.00	0.00	0.00	255.52	5,096.19	7,255,550.55	2,040,415.34	40° 13' 46.450 N	110° 4' 2.220 W
- plan misses target center by 5102.59usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			0.00	0.00	0.00	7,255,550.55	2,040,415.34		
Point 2			0.00	-5,310.27	10.40	7,250,241.11	2,040,509.71		
Point 3			0.00	-5,307.64	-2,608.45	7,250,202.33	2,037,891.15		
Point 4			0.00	-5,304.72	-5,226.51	7,250,163.84	2,035,273.37		
Point 5			0.00	-2,632.39	-5,292.43	7,252,834.80	2,035,165.20		
Point 6			0.00	-4.56	-5,297.84	7,255,462.21	2,035,118.23		
Point 7			0.00	-1.26	-1,340.94	7,255,528.09	2,039,074.58		
Point 8			0.00	0.00	0.00	7,255,550.55	2,040,415.34		
SEC. 10, T3S-R2W,	0.00	0.00	59.00	5,512.68	-223.31	7,260,722.93	2,035,013.37	40° 14' 38.410 N	110° 5' 10.810 W
- plan misses target center by 5517.20usft at 59.00usft MD (59.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			59.00	0.00	0.00	7,260,722.93	2,035,013.37		
Point 2			59.00	-2,629.86	13.15	7,258,093.61	2,035,068.11		
Point 3			59.00	-5,261.72	21.67	7,255,462.21	2,035,118.24		
Point 4			59.00	-5,267.64	-2,603.59	7,255,414.78	2,032,493.40		
Point 5			59.00	-5,274.27	-5,280.05	7,255,365.82	2,029,817.38		
Point 6			59.00	-18.63	-5,275.01	7,260,620.89	2,029,739.31		
Point 7			59.00	-3.88	-2,635.57	7,260,677.37	2,032,378.19		
Point 8			59.00	0.00	0.00	7,260,722.93	2,035,013.37		
SEC. 3 & 10, T3S-R2W,	0.00	0.00	78.00	909.69	-863.17	7,256,110.40	2,034,446.38	40° 13' 52.920 N	110° 5' 19.060 W
- plan misses target center by 1254.03usft at 78.00usft MD (78.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			78.00	0.00	0.00	7,256,110.40	2,034,446.38		
Point 2			78.00	1,970.11	-6.14	7,258,080.17	2,034,409.09		
Point 3			78.00	3,942.25	-16.92	7,260,051.89	2,034,367.12		
Point 4			78.00	5,261.73	-19.21	7,261,371.17	2,034,343.97		
Point 5			78.00	7,235.89	-16.81	7,263,345.12	2,034,315.15		
Point 6			78.00	8,548.30	-15.21	7,264,657.39	2,034,295.99		
Point 7			78.00	9,236.37	-14.41	7,265,345.39	2,034,285.91		
Point 8			78.00	9,236.37	-14.41	7,265,345.39	2,034,285.91		
Point 9			78.00	8,548.30	-15.21	7,264,657.39	2,034,295.99		



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH		
<b>Design:</b>	16-10-3-3-2WH Rev01		

Point 10	78.00	7,235.89	-16.81	7,263,345.12	2,034,315.15		
Point 11	78.00	5,261.73	-19.21	7,261,371.17	2,034,343.97		
Point 12	78.00	3,942.25	-16.92	7,260,051.89	2,034,367.12		
Point 13	78.00	1,970.11	-6.14	7,258,080.17	2,034,409.09		
Point 14	78.00	0.00	0.00	7,256,110.40	2,034,446.38		

SEC. 3 & 10, T3S-R21	0.00	0.00	78.00	900.03	-4,843.23	7,256,037.80	2,030,466.97	40° 13' 52.820 N	110° 6' 10.380 W
- plan misses target center by 4926.15usft at 78.00usft MD (78.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1	78.00	0.00	0.00	7,256,037.80	2,030,466.97				
Point 2	78.00	3,937.19	3.86	7,259,974.56	2,030,408.57				
Point 3	78.00	5,256.66	3.35	7,261,293.86	2,030,387.19				
Point 4	78.00	7,234.88	0.63	7,263,271.79	2,030,353.19				
Point 5	78.00	9,198.93	-11.40	7,265,235.40	2,030,310.11				
Point 6	78.00	9,198.93	-11.40	7,265,235.40	2,030,310.11				
Point 7	78.00	7,234.88	0.63	7,263,271.79	2,030,353.19				
Point 8	78.00	5,256.66	3.35	7,261,293.86	2,030,387.19				
Point 9	78.00	3,937.19	3.86	7,259,974.56	2,030,408.57				
Point 10	78.00	0.00	0.00	7,256,037.80	2,030,466.97				

SEC. 3, T3S-R2W,	0.00	0.00	78.00	5,512.68	-223.31	7,260,722.93	2,035,013.37	40° 14' 38.410 N	110° 5' 10.810 W
- plan misses target center by 5517.20usft at 78.00usft MD (78.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			0.00	7,260,722.93	2,035,013.37				
Point 2		-4.15	-2,635.57	7,260,677.37	2,032,378.19				
Point 3		-19.16	-5,275.01	7,260,620.89	2,029,739.31				
Point 4		2,618.79	-5,279.36	7,263,258.45	2,029,693.52				
Point 5		5,236.52	-5,296.10	7,265,875.59	2,029,635.65				
Point 6		5,253.59	-3,968.13	7,265,913.53	2,030,963.19				
Point 7		5,270.75	-2,639.37	7,265,951.56	2,032,291.51				
Point 8		5,301.20	5.71	7,266,023.57	2,034,935.79				
Point 9		3,944.28	4.28	7,264,666.79	2,034,955.68				
Point 10		2,631.88	2.85	7,263,354.53	2,034,974.87				
Point 11		0.00	0.00	7,260,722.93	2,035,013.37				
Point 12									

End Curve (16-10-3-3	0.00	0.00	8,996.15	379.82	-862.41	7,255,580.61	2,034,455.52	40° 13' 47.683 N	110° 5' 19.050 W
- plan misses target center by 0.33usft at 9260.78usft MD (8996.00 TVD, 379.84 N, -862.11 E)									
- Point									

Top Produccion (16-10-3-3	0.00	0.00	9,017.00	579.82	-862.41	7,255,780.59	2,034,452.35	40° 13' 49.660 N	110° 5' 19.050 W
- plan misses target center by 0.13usft at 9461.87usft MD (9017.13 TVD, 579.81 N, -862.39 E)									
- Rectangle (sides W0.00 H0.00 D800.00)									

T.D.-PBHL (16-10-3-3	0.00	0.00	9,543.60	10,475.93	-876.80	7,265,675.23	2,034,281.48	40° 15' 27.460 N	110° 5' 19.240 W
- plan misses target center by 0.59usft at 19372.04usft MD (9543.58 TVD, 10475.93 N, -876.21 E)									
- Rectangle (sides W0.00 H0.00 D800.00)									

## Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
8,591.97	8,520.00	Casing Pt.	0	0





## Planning Report



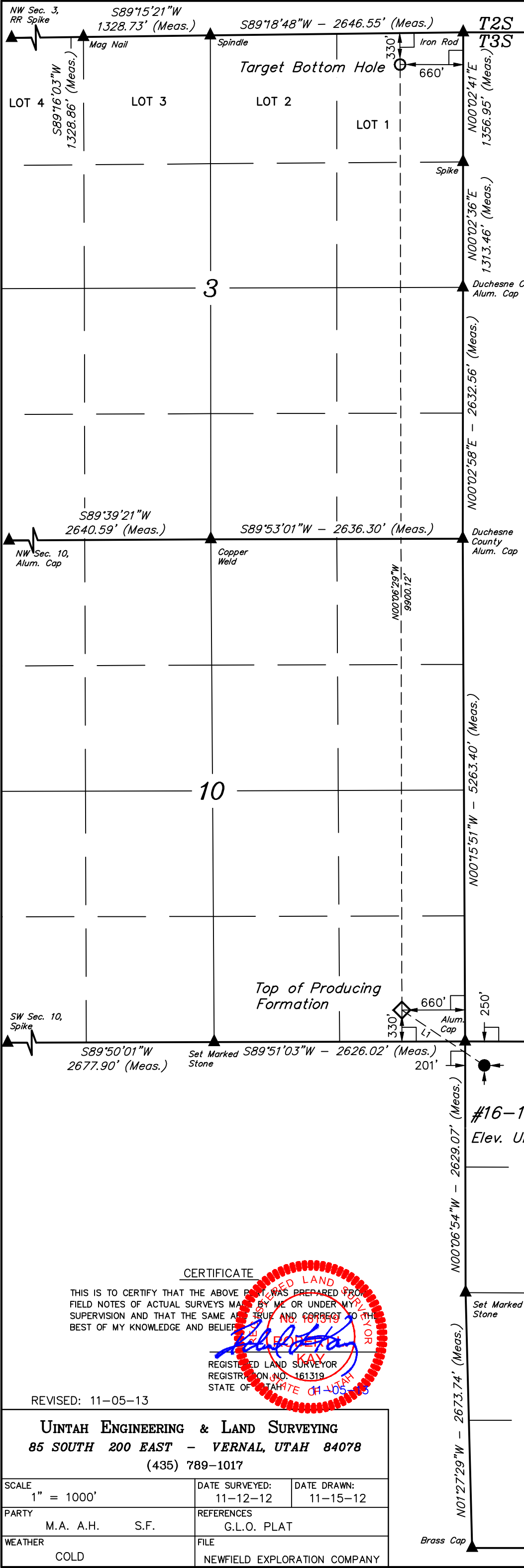
<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL(5416'+ 28'= 5,444' MSL) @ 5444.00usft (RIG (KB= 28'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH		
<b>Design:</b>	16-10-3-3-2WH Rev01		

## Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,541.69	3,025.72	Lower Black Shale		3.03	0.00
9,031.60	3,467.01	Uteland Butte Top		3.03	0.00
9,262.77	3,552.21	Landing Tgt. (90.04°)		3.03	0.00
9,453.58	3,572.25	Horz. Landing Tgt.(C-PZ2)		3.03	0.00

## Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.00	1,500.00	0.00	0.00	Start 1213 ft. Tangent at 1500 MD-TVD
2,713.00	2,713.00	0.00	0.00	Nudge KOP- Build Rate= 1.50/100' MD
3,379.41	3,376.04	0.91	-57.98	EOB-Start 4296 ft. Tangent at 3379 MD-3376 TVD
7,675.56	7,606.96	12.64	-803.62	Nudge Drop Rate= -1.50/100' MD
8,341.97	8,270.00	13.55	-861.60	Nudge Vert. Pt.= 8342 MD- 8270 TVD
8,541.97	8,470.00	13.55	-861.60	Start 50 ft. Tangent at 8542 MD- 8470 TVD
8,591.97	8,520.00	13.55	-861.60	Start 69 ft. Tangent at 8592 MD- 8520 TVD
8,660.97	8,589.00	13.55	-861.60	Curve KOP- Build Rate= 14.00°/100 MD
9,260.77	8,996.00	379.82	-862.11	Land Pt.(83.97°)= 9261 MD- 8996 TVD
9,461.87	9,017.13	579.81	-862.39	Curve Build Rate= 3.00/100 MD (Top Prod)
9,561.87	9,025.02	679.48	-862.53	Start 9810 ft. Tangent at 9562 MD- 9025 TVD
19,372.04	9,543.58	10,475.93	-876.21	TD-PBHL= 19372 MD- 9543.58 TVD



NEWFIELD EXPLORATION COMPANY

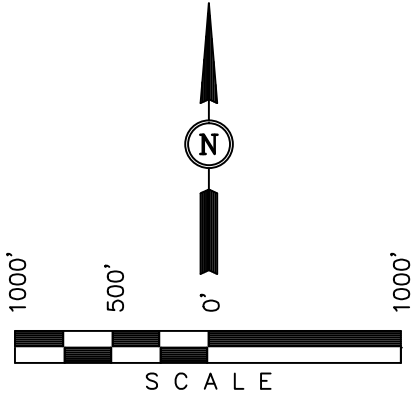
Well location, #16-10-3-3-2WH, located as shown in the NW 1/4 NW 1/4 of Section 14, T3S, R2W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE NORTHEAST CORNER OF SECTION 20, T3S, R2W, U.S.B.&M. TAKEN FROM THE MYTON, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5148 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



T3S, R2W, U.S.B.&M.

LINE TABLE

LINE	DIRECTION	LENGTH
L1	N56°09'03"W	1039.28'

<b>NAD 83 (SURFACE LOCATION)</b>	
LATITUDE	= 40°13'43.93" (40.228869)
LONGITUDE	= 110°05'07.93" (110.085536)
<b>NAD 27 (SURFACE LOCATION)</b>	
LATITUDE	= 40°13'44.08" (40.228911)
LONGITUDE	= 110°05'05.39" (110.084831)
<b>NAD 83 (TOP OF PRODUCING FORMATION)</b>	
LATITUDE	= 40°13'49.66" (40.230461)
LONGITUDE	= 110°05'19.05" (110.088625)
<b>NAD 27 (TOP OF PRODUCING FORMATION)</b>	
LATITUDE	= 40°13'49.80" (40.230500)
LONGITUDE	= 110°05'16.51" (110.087919)
<b>NAD 83 (TARGET BOTTOM HOLE)</b>	
LATITUDE	= 40°15'27.46" (40.257628)
LONGITUDE	= 110°05'19.24" (110.088678)
<b>NAD 27 (TARGET BOTTOM HOLE)</b>	
LATITUDE	= 40°15'27.61" (40.257669)
LONGITUDE	= 110°05'16.70" (110.087972)

LEGEND:

- └─ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- △ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

ROBERT KAY  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

REVISED: 11-05-13

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 11-12-12	DATE DRAWN: 11-15-12
PARTY M.A. A.H. S.F.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE NEWFIELD EXPLORATION COMPANY	

## NEWFIELD EXPLORATION COMPANY

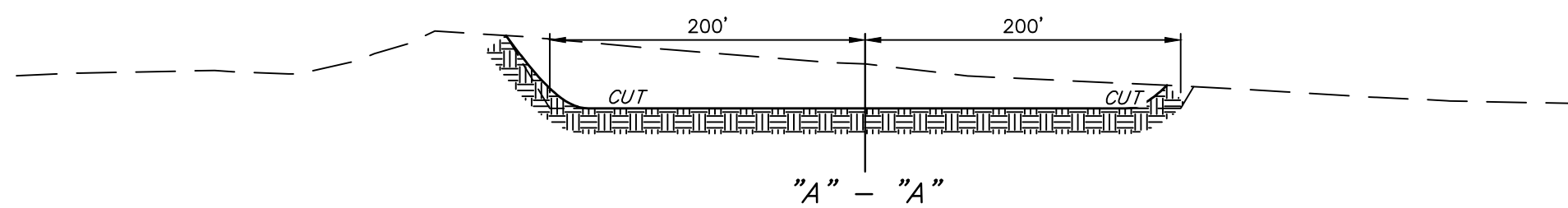
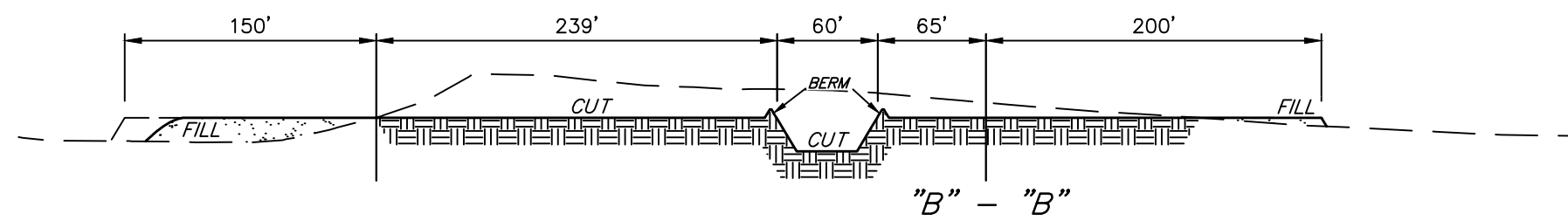
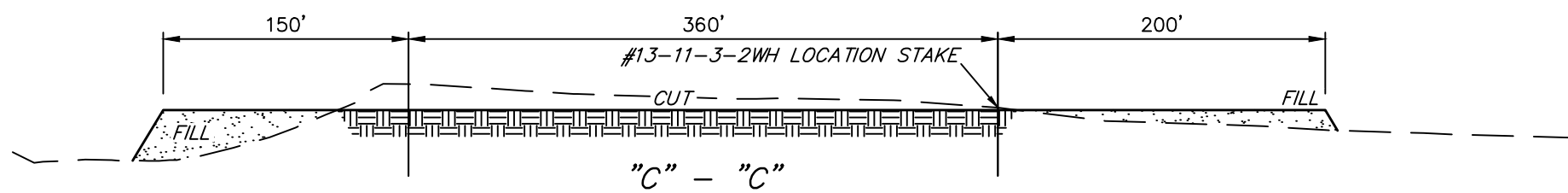
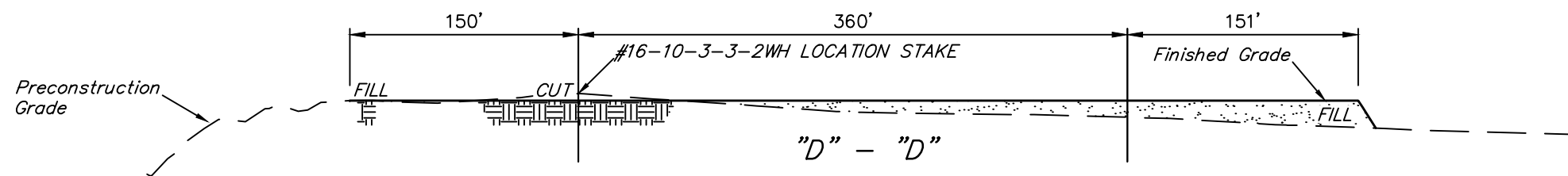
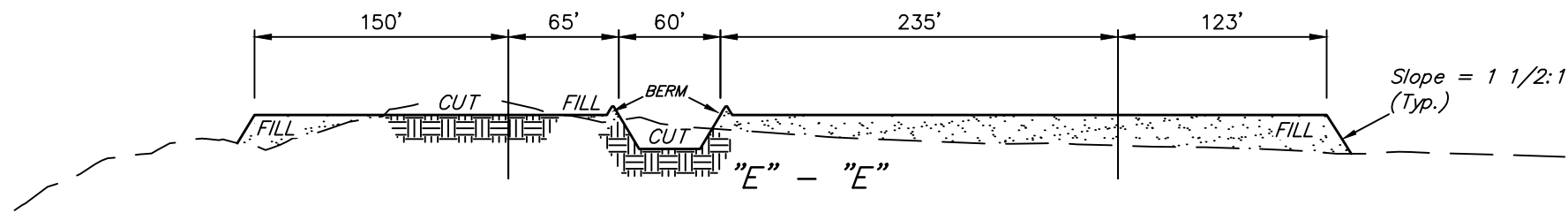
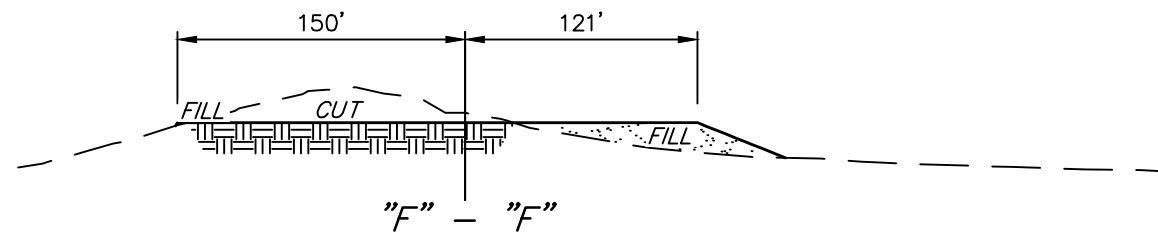
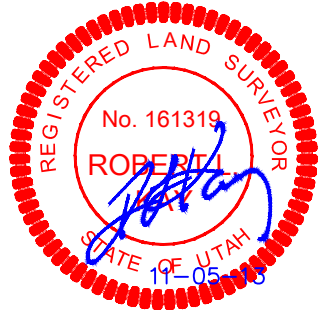
## TYPICAL CROSS SECTIONS FOR

#4-14-3-2 WELL PAD FOR  
 #16-10-3-3-2WH, #1A-15-3-2WH,  
 #13-11-3-2WH & #3-14-3-2WH  
 SECTION 14, T3S, R2W, U.S.B.&M.  
 NW 1/4 NW 1/4

FIGURE #2

X-Section  
 Scale  
 1" = 40'  
 1" = 100'

DATE: 05-02-13  
 DRAWN BY: S.F.  
 REVISED: 06-03-13  
 REVISED: 06-26-13  
 REVISED: 11-05-13



## NOTE:

Topsoil should not be  
 Stripped Below Finished  
 Grade on Substructure Area.

\* NOTE:  
 FILL QUANTITY INCLUDES  
 5% FOR COMPACTION

## APPROXIMATE YARDAGES

(6") Topsoil Stripping = 6,900 Cu. Yds.  
 Remaining Location = 34,870 Cu. Yds.  
 TOTAL CUT = 41,770 CU. YDS.  
 FILL = 33,130 CU. YDS.

EXCESS MATERIAL = 8,640 Cu. Yds.  
 Topsoil & Pit Backfill = 8,640 Cu. Yds.  
 (1/2 Pit Vol.)  
 EXCESS UNBALANCE = 0 Cu. Yds.  
 (After Interim Rehabilitation)

APPROXIMATE ACREAGE  
 WELL SITE DISTURBANCE = ± 10.751 ACRES  
 ACCESS ROAD DISTURBANCE = ± 1.796 ACRES  
 PIPELINE DISTURBANCE = ± 0.111 ACRES  
 TOTAL = ± 12.658 ACRES

UINTAH ENGINEERING & LAND SURVEYING  
 85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

RECEIVED: Jan. 10, 2014



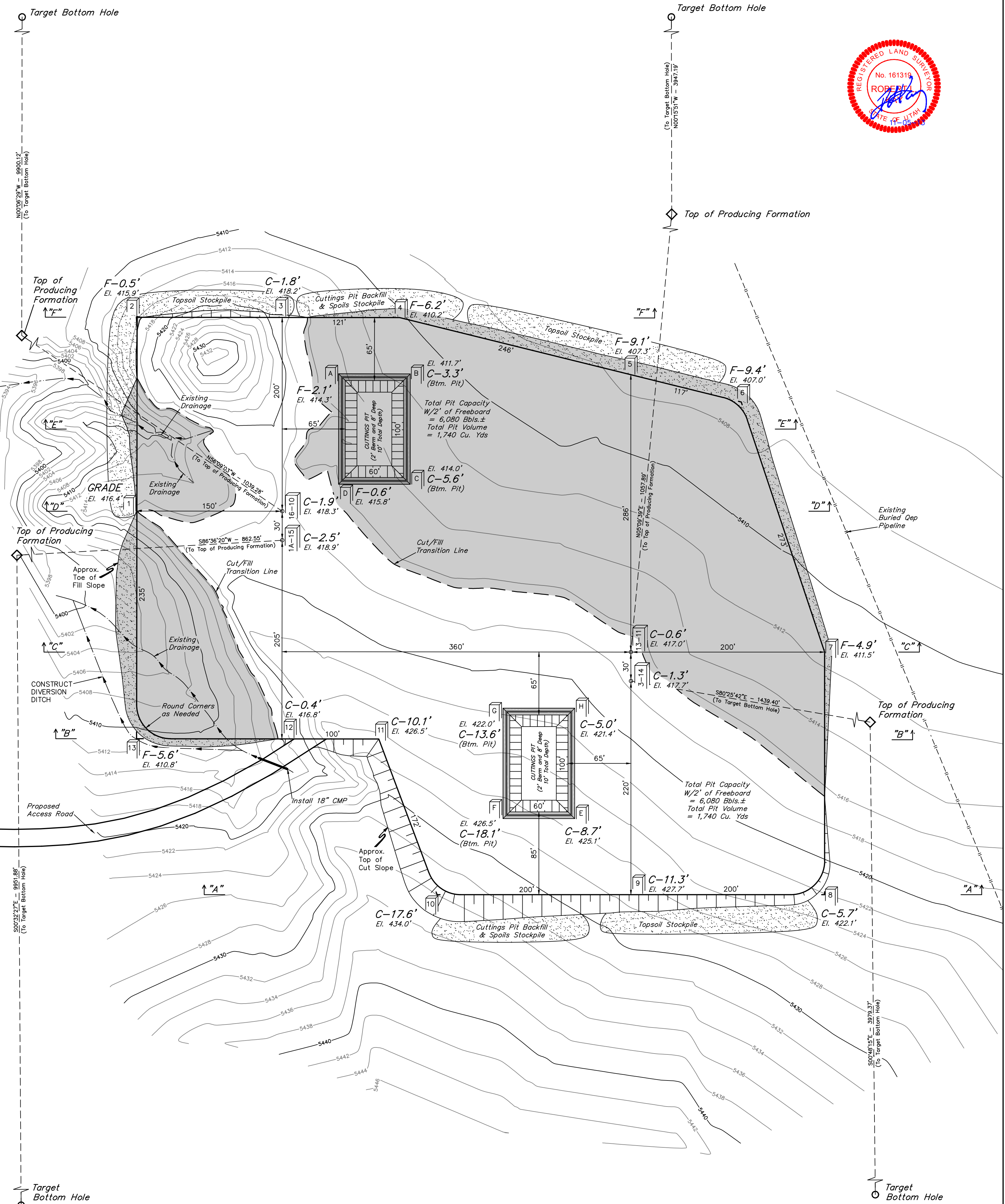
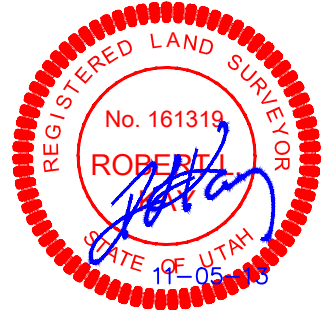
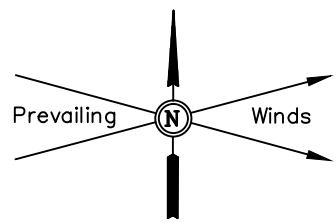
## NEWFIELD EXPLORATION COMPANY

## LOCATION LAYOUT FOR

#4-14-3-2 WELL PAD FOR  
 #16-10-3-3-2WH, #1A-15-3-2WH,  
 #13-11-3-2WH & #3-14-3-2WH  
 SECTION 14, T3S, R2W, U.S.B.&M.  
 NW 1/4 NW 1/4

FIGURE #1

SCALE: 1" = 60'  
 DATE: 05-02-13  
 DRAWN BY: S.F.  
 REVISED: 06-03-13  
 REVISED: 06-26-13  
 REVISED: 11-05-13



Elev. Ungraded Ground At #16-10-3-3-2WH Loc. Stake = 5418.3'  
 FINISHED GRADE ELEV. AT #16-10-3-3-2WH LOC. STAKE = 5416.4'

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RECEIVED: Jan. 10, 2014

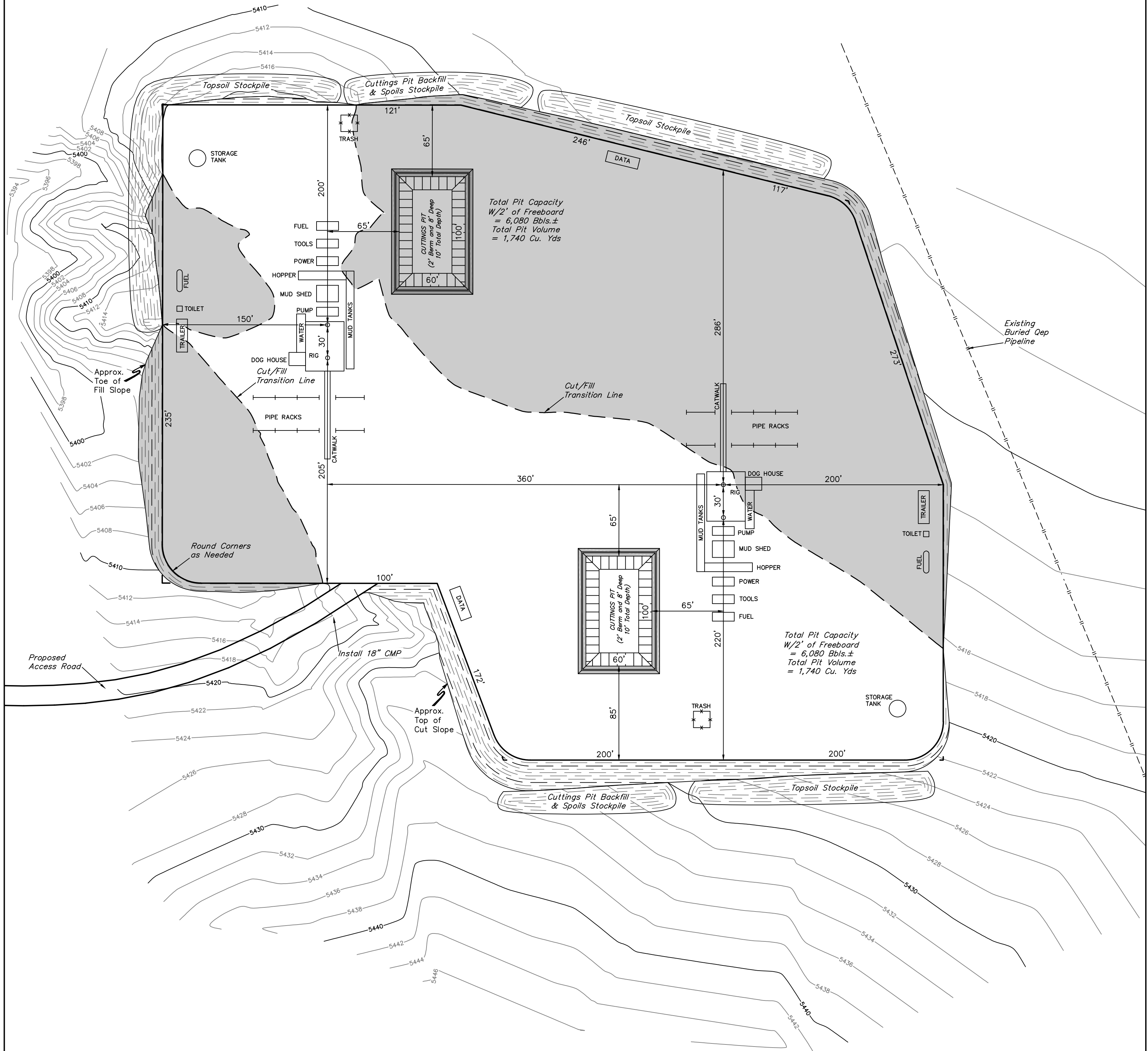
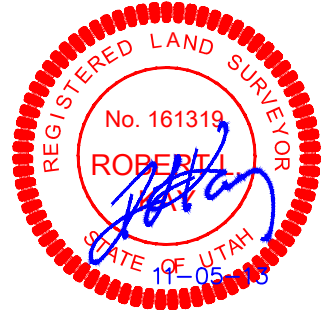
## NEWFIELD EXPLORATION COMPANY

TYPICAL RIG LAYOUT FOR

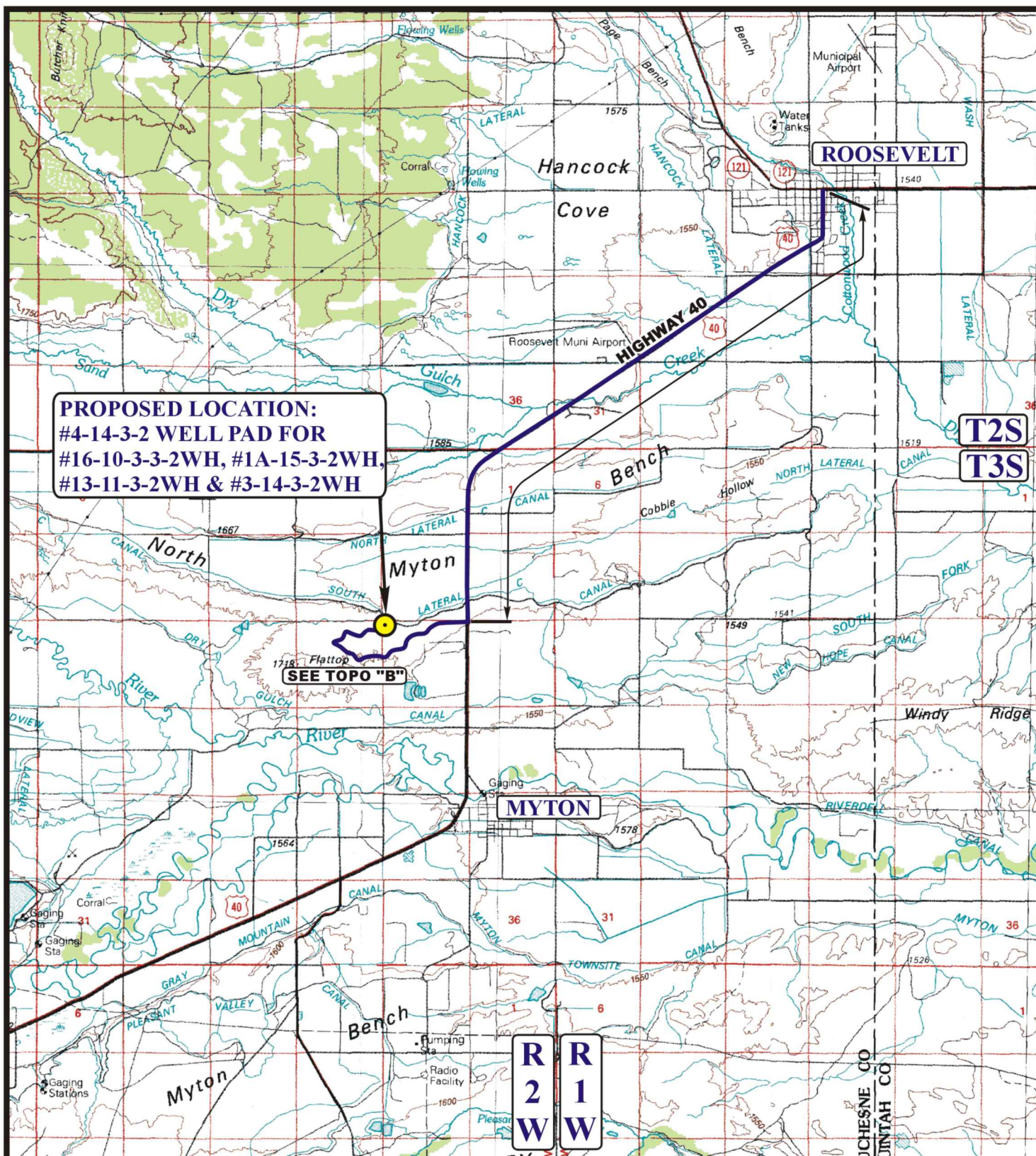
#4-14-3-2 WELL PAD FOR  
#16-10-3-3-2WH, #1A-15-3-2WH,  
#13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
NW 1/4 NW 1/4

*FIGURE #3*

SCALE: 1" = 60'  
DATE: 05-02-13  
DRAWN BY: S.F.  
REVISED: 06-26-13  
REVISED: 11-05-13







# LEGEND:

 PROPOSED LOCATION

# NEWFIELD EXPLORATION COMPANY

#4-14-3-2 WELL PAD FOR #16-10-3-3-2WH,  
#1A-15-3-2WH, #13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
NW 1/4 NW 1/4



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



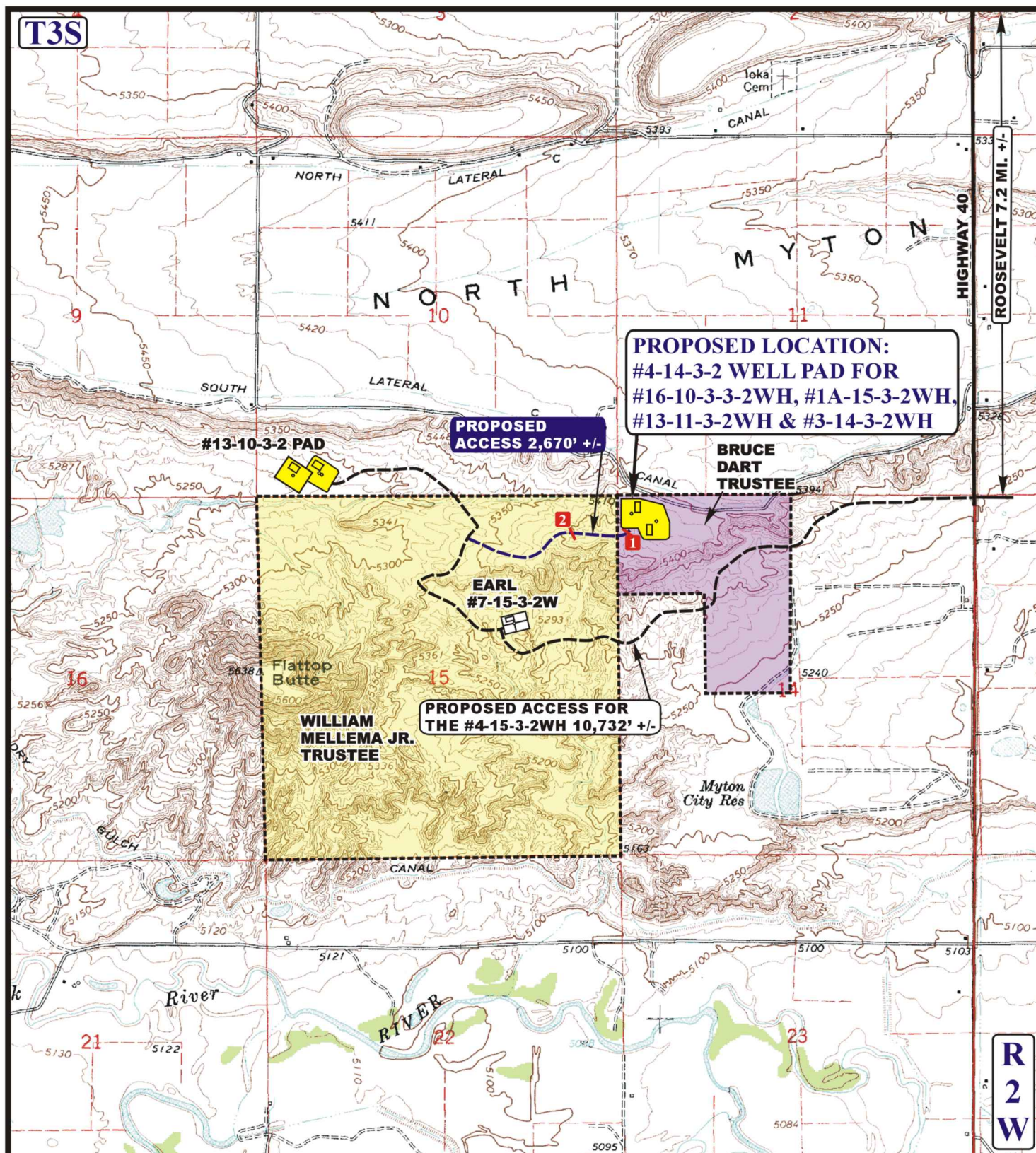
**ACCESS ROAD  
MAP**

**11 20 12**  
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: C.I. REV: 11-06-13 S.O.







# LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- 1 18" CMP REQUIRED 2 24" CMP REQUIRED



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# NEWFIELD EXPLORATION COMPANY

#4-14-3-2 WELL PAD FOR #16-10-3-3-2WH,  
 #1A-15-3-2WH, #13-11-3-2WH & #3-14-3-2WH  
 SECTION 14, T3S, R2W, U.S.B.&M.  
 NW 1/4 NW 1/4

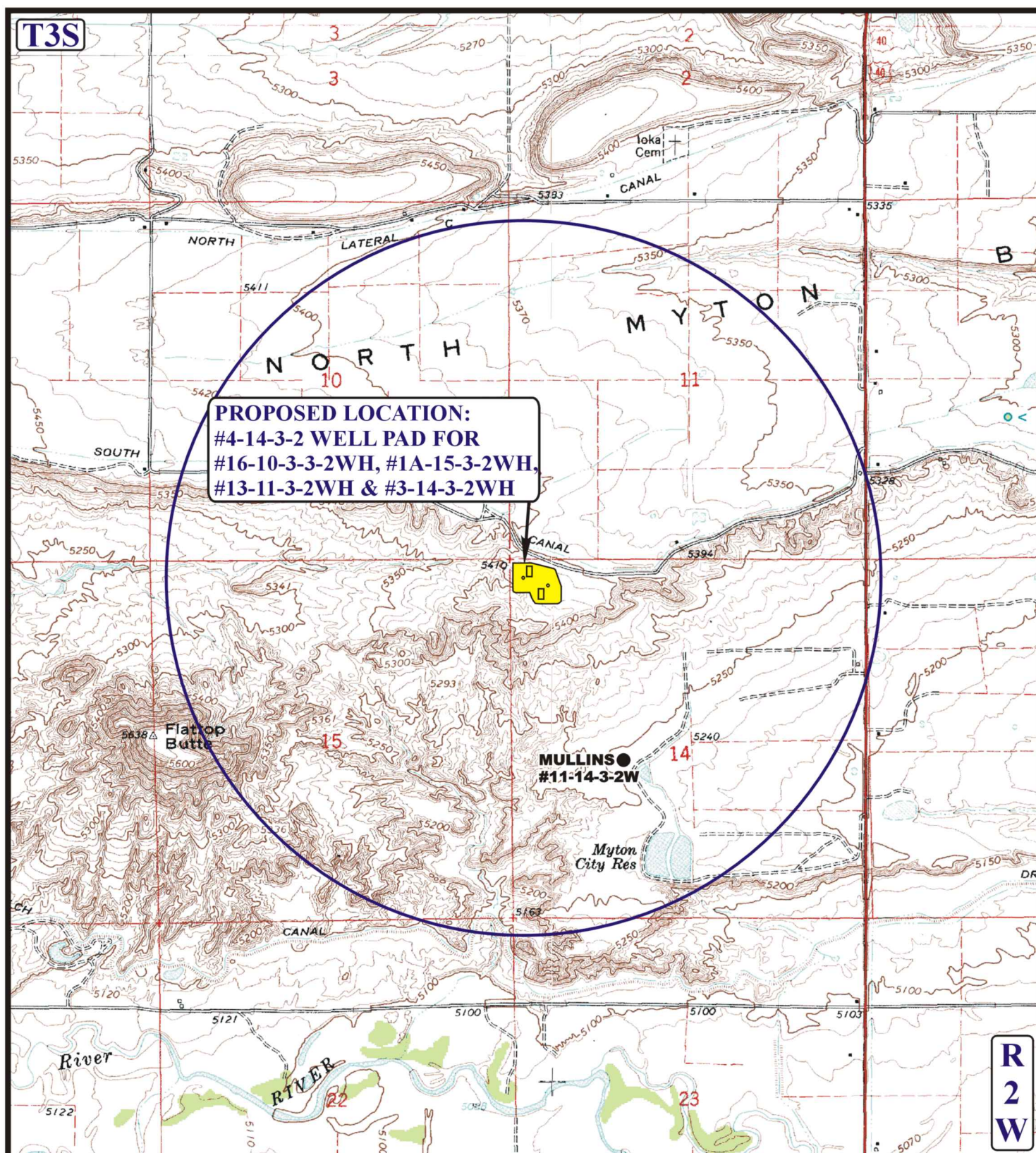
**ACCESS ROAD**  
**MAP**

11 20 12  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.I. REV: 11-06-13 S.O.

**B**  
**TOPO**





### LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

### NEWFIELD EXPLORATION COMPANY

#4-14-3-2 WELL PAD FOR #16-10-3-3-2WH,  
#1A-15-3-2WH, #13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
NW 1/4 NW 1/4



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



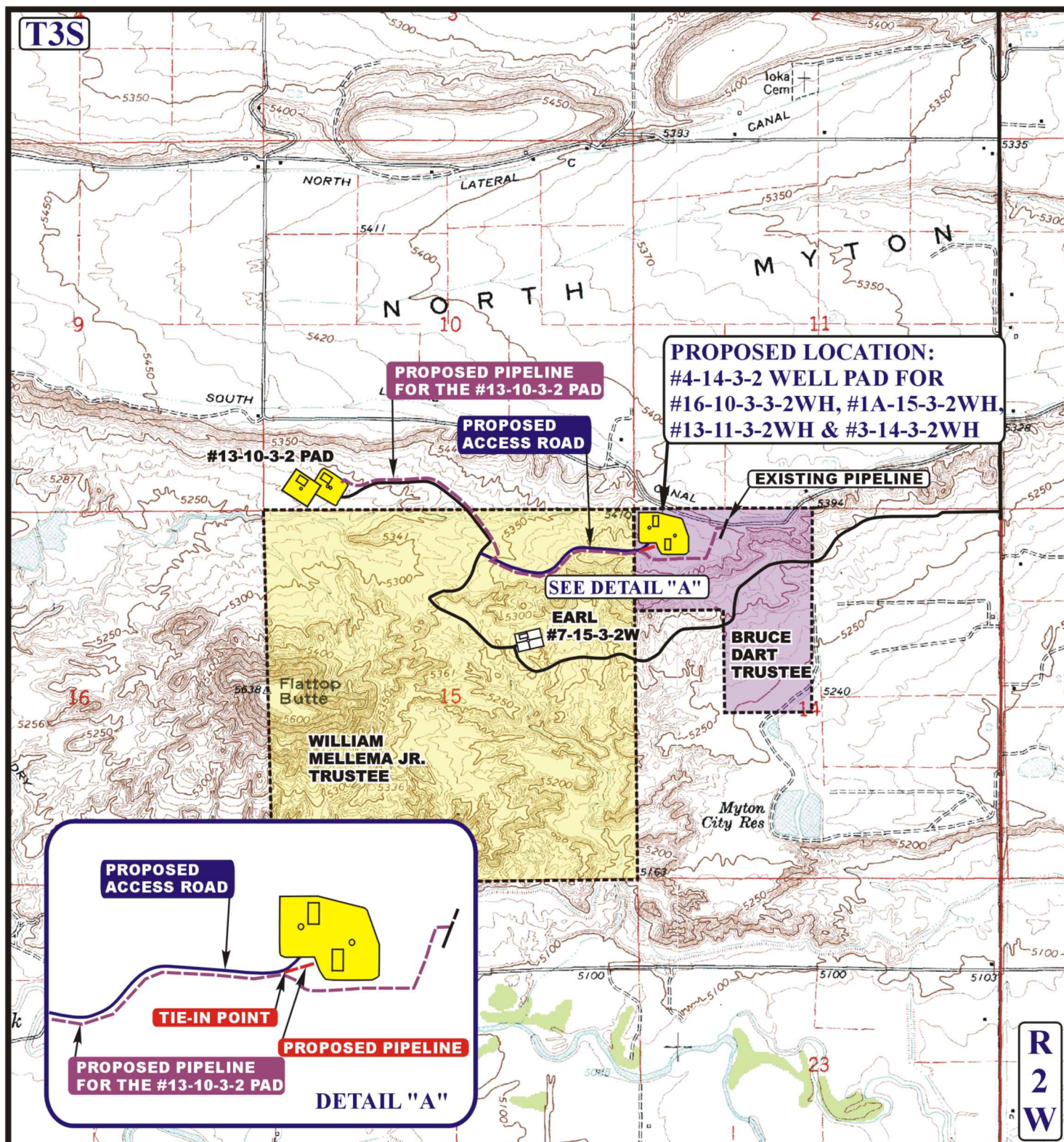
**TOPOGRAPHIC  
MAP**

**11 20 12**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.I. REV: 11-06-13 S.O.

**C  
TOPO**





**APPROXIMATE TOTAL PIPELINE DISTANCE = 209' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)

**NEWFIELD EXPLORATION COMPANY**

#4-14-3-2 WELL PAD FOR #16-10-3-3-2WH,  
#1A-15-3-2WH, #13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
NW 1/4 NW 1/4



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC  
MAP**

SCALE: 1" = 2000'

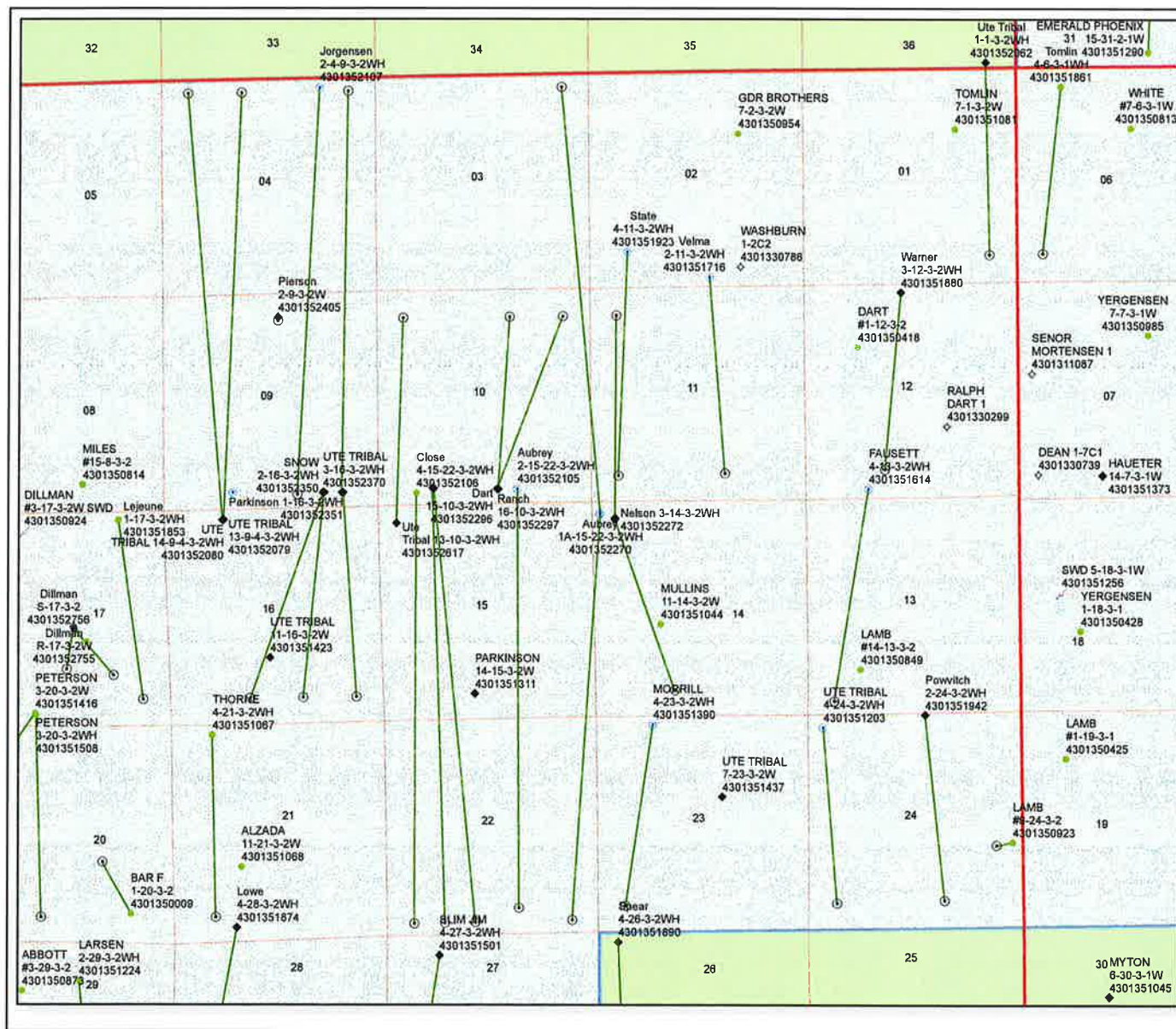
DRAWN BY: C.I.

**11 20 12**  
MONTH DAY YEAR

REV: 11-06-13 S.O.







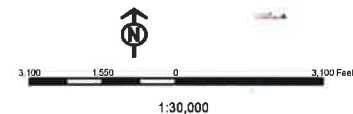
API Number: 4301352172

Well Name: RANCH 16-10-3-3-2WH

Township: T03.0S Range: R02.0W Section: 14 Meridian: U

Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared: 1/14/2014  
Map Produced by Diana Mason





<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Patented
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1001 17th Street, Suite 2000 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> RANCH 16-10-3-3-2WH
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0280 FNL 0201 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 14 Township: 03.0S Range: 02.0W Meridian: U		<b>9. API NUMBER:</b> 43013521720000
<b>PHONE NUMBER:</b> 303 382-4443 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NORTH MYTON BENCH
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>1/14/2014</b>	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  

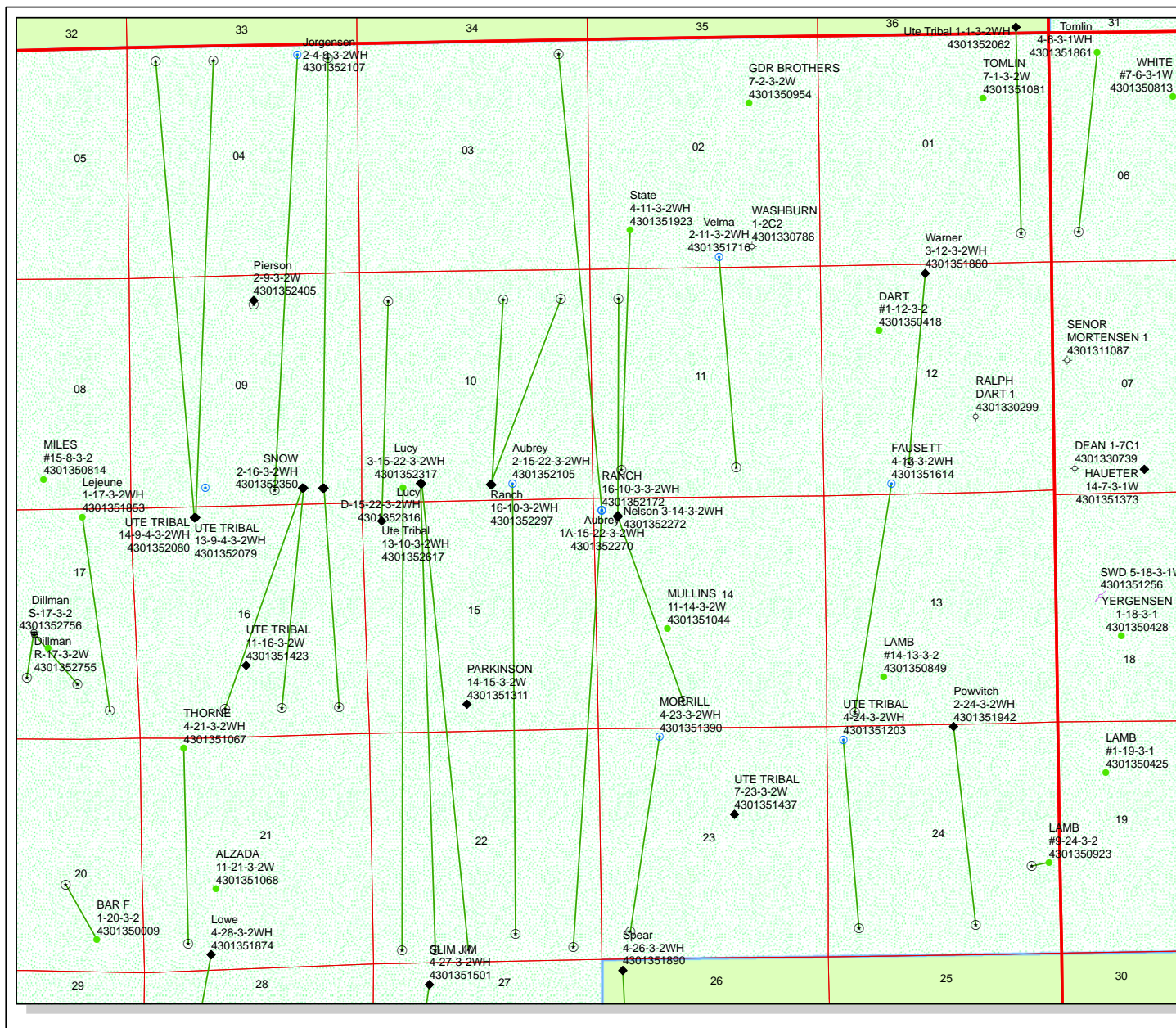
Newfield Production Company respectfully requests that the surface hole location for the Ranch 16-10-3-3-2WH be changed from 250' FNL & 201' FWL, NWNW, Section 14, T3S, R2W, USB&M to 280' FNL & 201' FWL, NWNW, Section 14, T3S, R2W, USB&M. Attached are new well location plats and an exception location letter. Also, a new directional survey and drill plan will be submitted to UDOGM as soon as possible.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: January 16, 2014

By: *Derek Duff*

<b>NAME (PLEASE PRINT)</b> Matt Barber	<b>PHONE NUMBER</b> 303 382-4493	<b>TITLE</b> Senior Regulatory Specialist
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/14/2014	



API Number: 4301352172

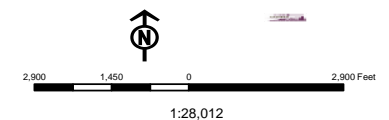
Well Name: RANCH 16-10-3-3-2WH

Township: T03.0S Range: R02.0W Section: 14 Meridian: U

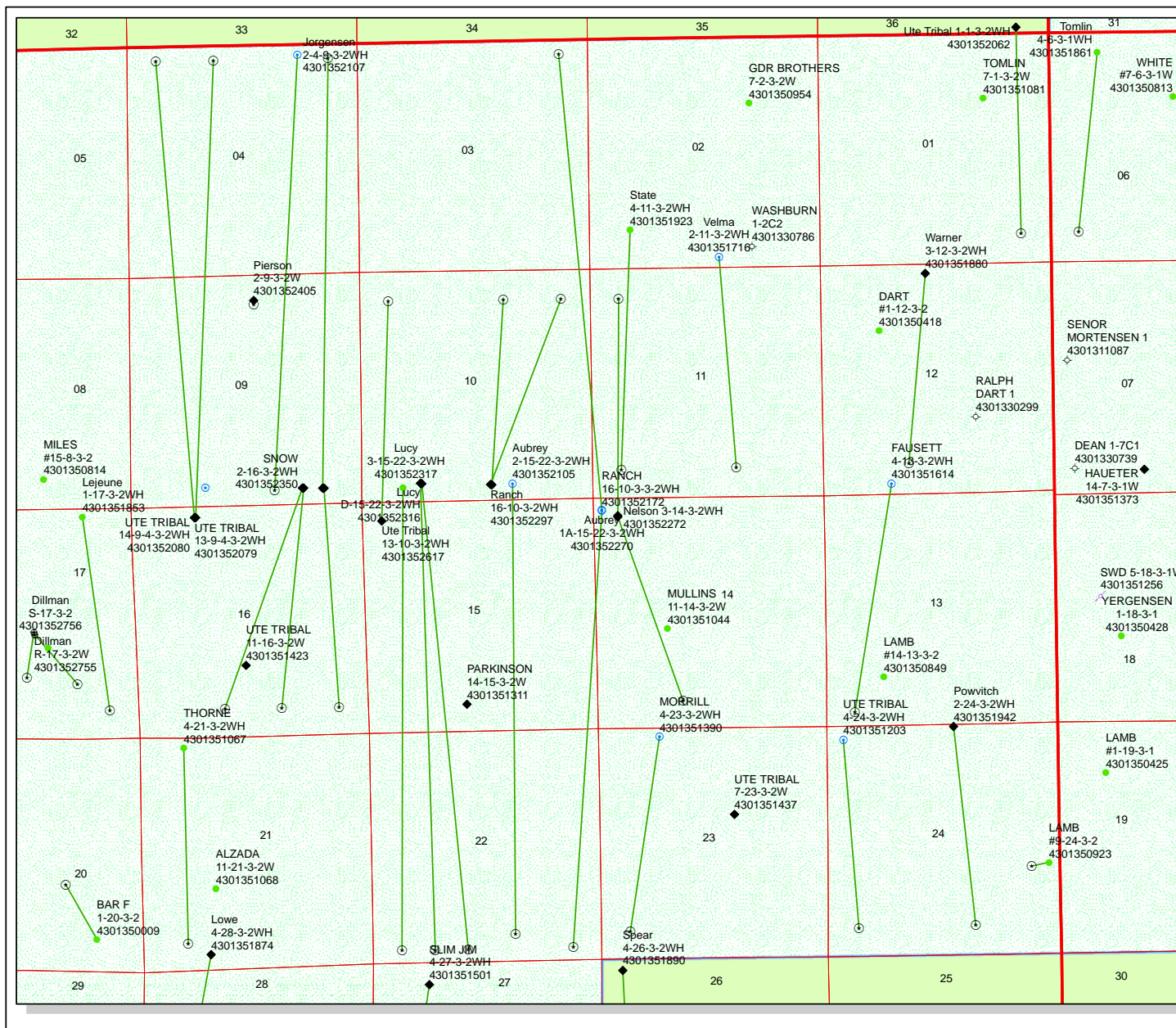
Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared: 1/16/2014  
Map Produced by Diana Mason

Wells Query		Units	
Status		STATUS	
APD - Approved Permit		ACTIVE	
DRL - Spudded (Drilling Commenced)		EXPLORATORY	
GIW - Gas Injection		GAS STORAGE	
GS - Gas Storage		NF PP OIL	
LOC - New Location		NF SECONDARY	
OPS - Operation Suspended		PI OIL	
PA - Plugged Abandoned		PP GAS	
PGW - Producing Gas Well		PP GEOTHERML	
POW - Producing Oil Well		PP OIL	
SGW - Shut-in Gas Well		SECONDARY	
SOW - Shut-in Oil Well		TERMINATED	
TA - Temp. Abandoned			
TW - Test Well			
WOW - Water Disposal			
WW - Water Injection Well			
WSW - Water Supply Well			
		Fields	STATUS
		Unknown	
		ABANDONED	
		ACTIVE	
		COMBINED	
		INACTIVE	
		STORAGE	
		TERMINATED	







API Number: 4301352172

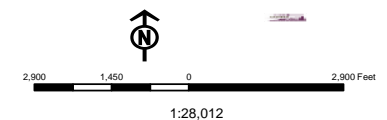
Well Name: RANCH 16-10-3-3-2WH

Township: T03.0S Range: R02.0W Section: 14 Meridian: U

Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared: 1/16/2014  
Map Produced by Diana Mason

Wells Query		Units	
Status		STATUS	
APD - Approved Permit		ACTIVE	
DRL - Spudded (Drilling Commenced)		EXPLORATORY	
GIW - Gas Injection		GAS STORAGE	
GS - Gas Storage		NF PP OIL	
LOC - New Location		NF SECONDARY	
OPS - Operation Suspended		PI OIL	
PA - Plugged Abandoned		PP GAS	
PGW - Producing Gas Well		PP GEOTHERML	
POW - Producing Oil Well		PP OIL	
SGW - Shut-in Gas Well		SECONDARY	
SOW - Shut-in Oil Well		TERMINATED	
TA - Temp. Abandoned			
TW - Test Well			
WOW - Water Disposal			
WW - Water Injection Well			
WSW - Water Supply Well			



**NEWFIELD**



January 14, 2014

State of Utah  
Division of Oil, Gas & Mining  
ATTN: Brad Hill  
PO Box 145801  
Salt Lake City, UT 84114

**Newfield Exploration Company**

1001 17th Street | Suite 2000  
Denver, Colorado 80202  
PH 303-893-0102 | FAX 303-893-0103

RE: Ranch 16-10-3-3-2WH  
Township 3 South, Range 2 West, Sections 3 & 10  
Duchesne County, Utah

Dear Mr. Hill,

Newfield Production Company ("Newfield") proposes to drill the Ranch 16-10-3-3-2WH from a surface location of 280' FNL and 201' FWL of Section 14, T3S R2W, to a bottom hole location of 330' FNL and 660' FEL of Section 3, T3S R2W.

The Ranch 16-10-3-3-2WH is covered by Order No. 139-113, which requires no portion of the producing interval of the horizontal lateral be closer than 330' from the northern or southern section boundaries and no closer than 660' from the eastern or western section boundaries, and requires proper surface and sub-surface authorization be obtained when the surface location is located off of the drilling unit.

In compliance with the above referenced Order, the top of the uppermost producing zone of the Ranch 16-10-3-3-2WH is 330' FSL and 660' FEL of Section 10, T3S R2W. In the event a future recompletion outside of this setback is proposed, Newfield shall attempt to acquire consent from all the owners in Section 13, T3S R2W, and shall file the appropriate application with the State. The bottom hole location of the Ranch 16-10-3-3-2WH is 330' FNL and 660' FEL of Section 3, T3S R2W. In the event the horizontal lateral drifts east, Newfield will attempt to acquire consent from all owners in Sections 2 & 11, T3S R2W, and shall file the appropriate application with the State.

In further compliance of the above referenced Order, Newfield has obtained authorization from the surface owner of the drilling location, as is evidenced by the Affidavit of Easement, Right-of-Way and Surface Use Agreement attached to the APD. Newfield and its partners are the leasehold owners of the minerals underlying the surface location and all that portion of the wellbore of the Ranch 16-10-3-3-2WH lying outside the drilling unit.

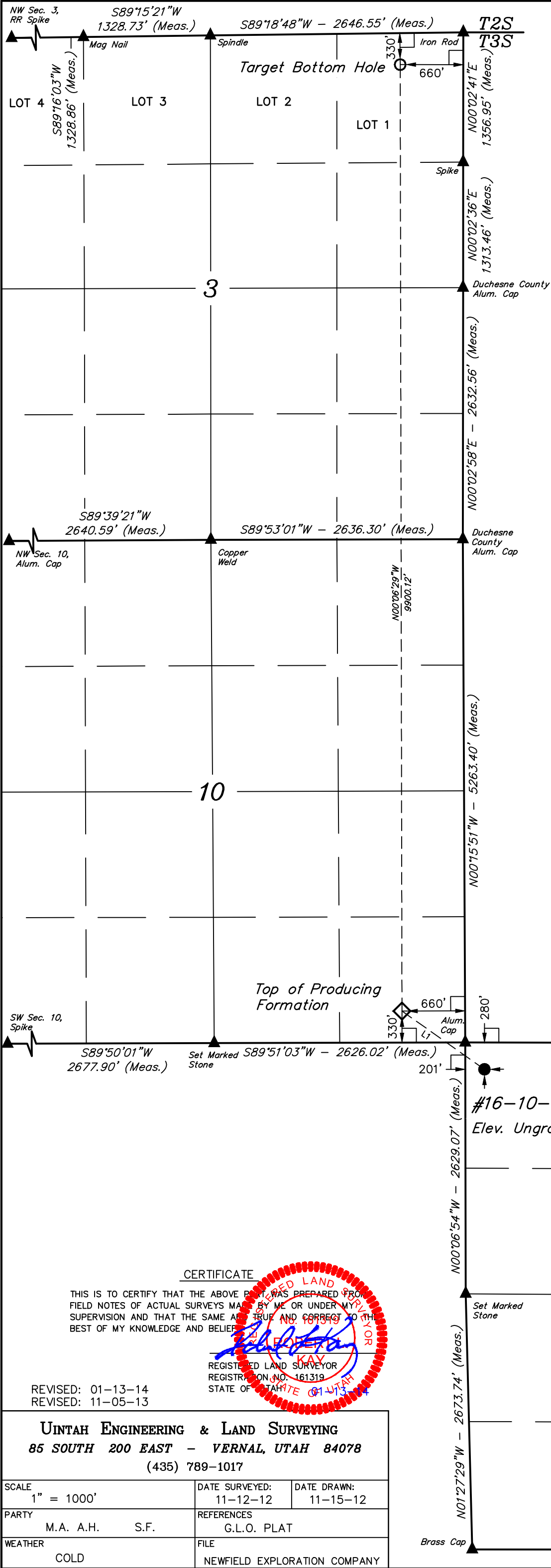
Based on Newfield's compliance with the requirements of Order No. 139-113, Newfield respectfully requests the approval of our APD for the Ranch 16-10-3-3-2WH.

If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4466 or by email at [rnmler@newfield.com](mailto:rnmler@newfield.com). Your consideration of this matter is greatly appreciated.

Sincerely,

  
Robert N. Miller II  
Landman





NEWFIELD EXPLORATION COMPANY

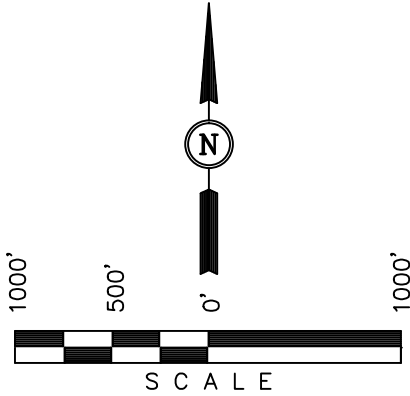
Well location, #16-10-3-3-2WH, located as shown in the NW 1/4 NW 1/4 of Section 14, T3S, R2W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE NORTHEAST CORNER OF SECTION 20, T3S, R2W, U.S.B.&M. TAKEN FROM THE MYTON, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5148 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



T3S, R2W, U.S.B.&M.

LINE TABLE

LINE	DIRECTION	LENGTH
L1	N54°48'02"W	1056.38'

<b>NAD 83 (SURFACE LOCATION)</b>	
LATITUDE	= 40°13'43.64" (40.228789)
LONGITUDE	= 110°05'07.93" (110.085536)
<b>NAD 27 (SURFACE LOCATION)</b>	
LATITUDE	= 40°13'43.78" (40.228828)
LONGITUDE	= 110°05'05.39" (110.084831)
<b>NAD 83 (TOP OF PRODUCING FORMATION)</b>	
LATITUDE	= 40°13'49.66" (40.230461)
LONGITUDE	= 110°05'19.05" (110.088625)
<b>NAD 27 (TOP OF PRODUCING FORMATION)</b>	
LATITUDE	= 40°13'49.80" (40.230500)
LONGITUDE	= 110°05'16.51" (110.087919)
<b>NAD 83 (TARGET BOTTOM HOLE)</b>	
LATITUDE	= 40°15'27.46" (40.257628)
LONGITUDE	= 110°05'19.24" (110.088678)
<b>NAD 27 (TARGET BOTTOM HOLE)</b>	
LATITUDE	= 40°15'27.61" (40.257669)
LONGITUDE	= 110°05'16.70" (110.087972)

LEGEND:

- └─ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- △ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

REVISED: 01-13-14  
REVISED: 11-05-13

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 11-12-12	DATE DRAWN: 11-15-12
PARTY M.A. A.H. S.F.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE NEWFIELD EXPLORATION COMPANY	



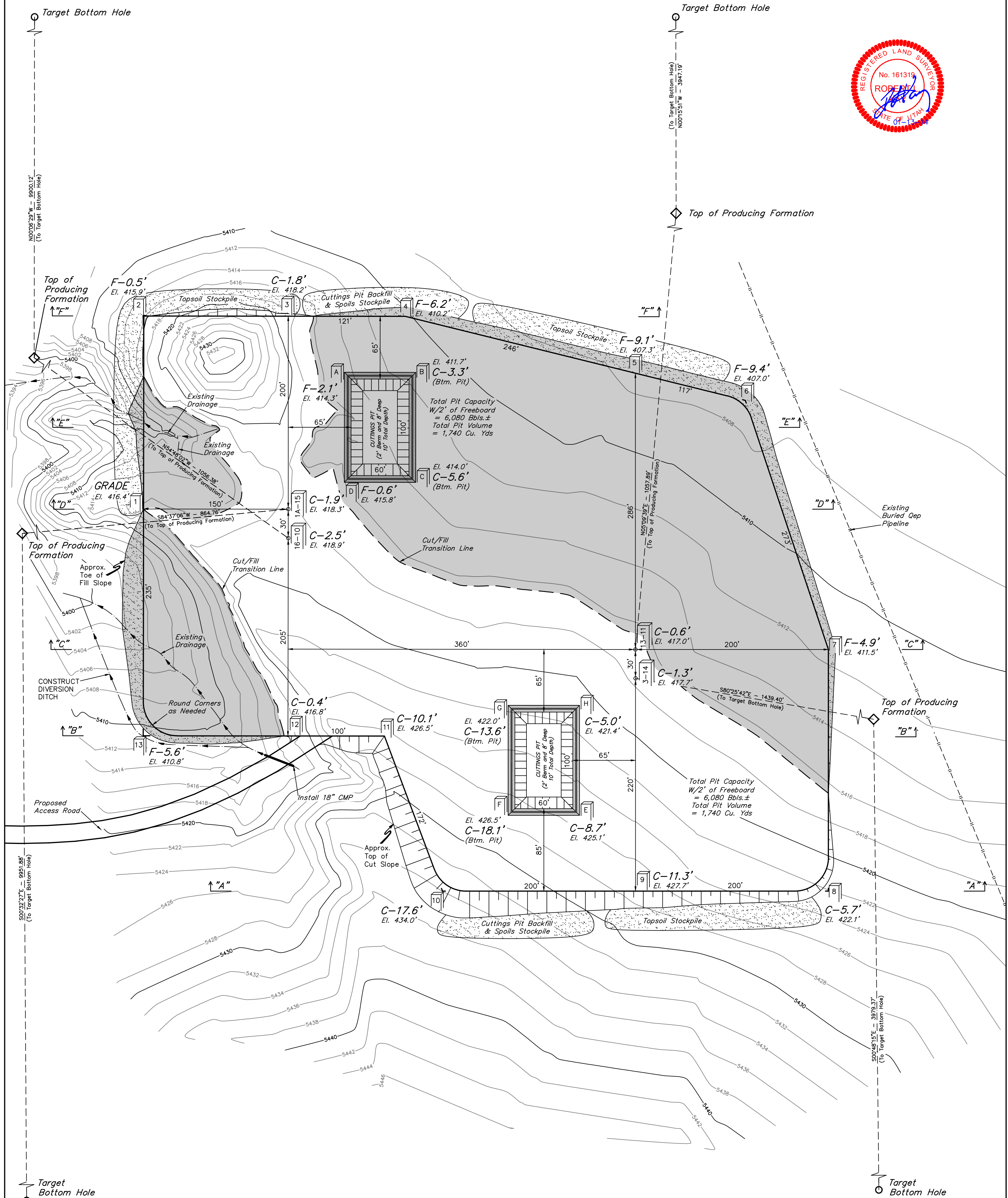
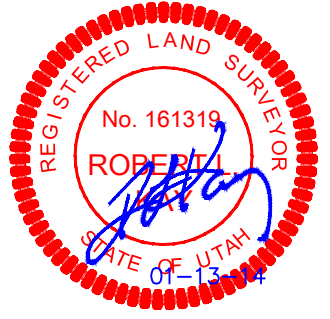
## NEWFIELD EXPLORATION COMPANY

## LOCATION LAYOUT FOR

#4-14-3-2 WELL PAD FOR  
 #16-10-3-3-2WH, #1A-15-22-3-2WH,  
 #13-11-3-2WH & #3-14-3-2WH  
 SECTION 14, T3S, R2W, U.S.B.&M.  
 NW 1/4 NW 1/4

FIGURE #1

SCALE: 1" = 60'  
 DATE: 05-02-13  
 DRAWN BY: S.F.  
 REVISED: 06-03-13  
 REVISED: 06-26-13  
 REVISED: 11-05-13  
 REVISED: 01-13-14



Elev. Ungraded Ground At #1A-15-22-3-2WH Loc. Stake = 5418.3'  
 FINISHED GRADE ELEV. AT #1A-15-22-3-2WH LOC. STAKE = 5416.4'

UINTAH ENGINEERING & LAND SURVEYING  
 85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

RECEIVED: Jan. 15, 2014

## NEWFIELD EXPLORATION COMPANY

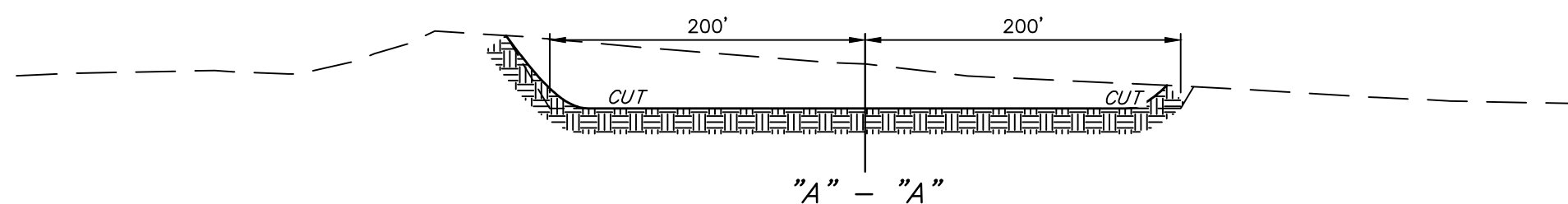
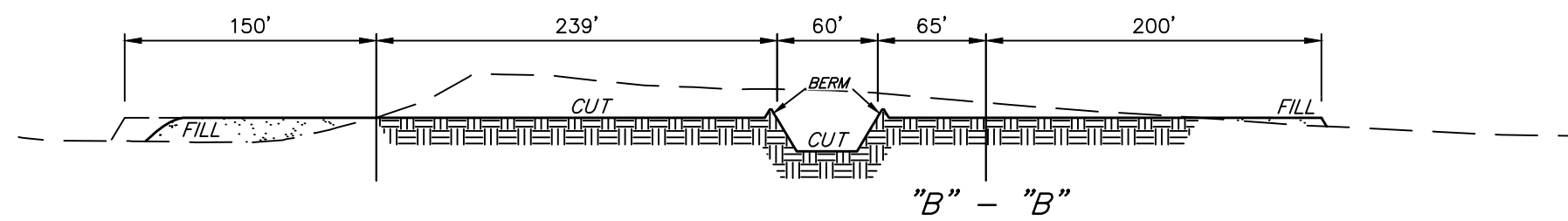
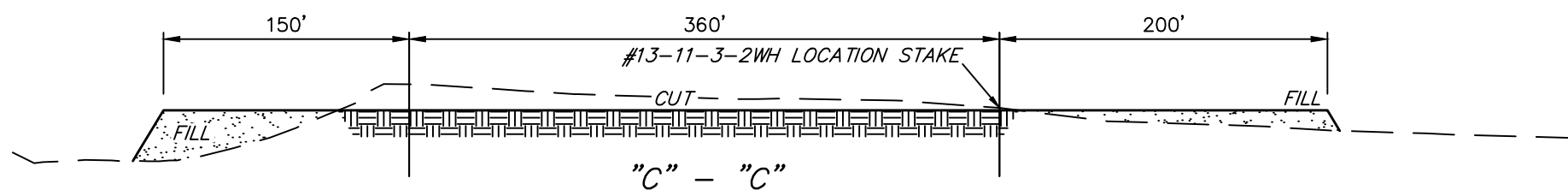
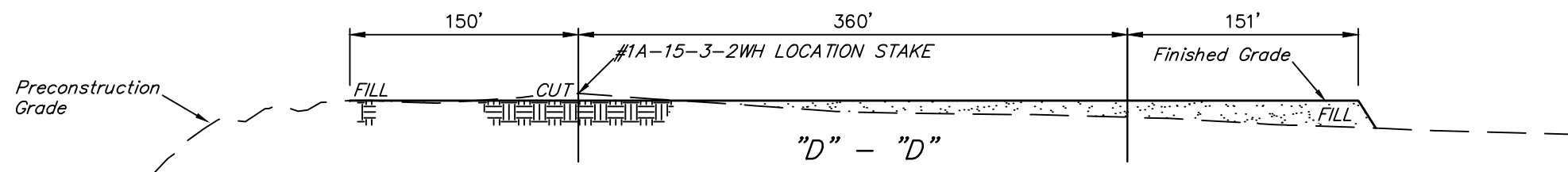
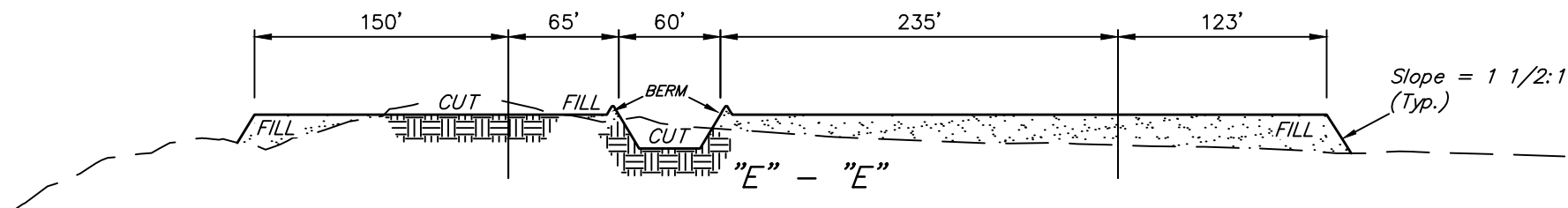
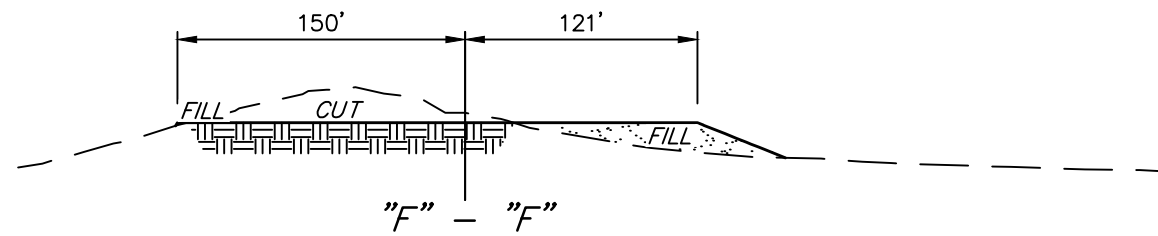
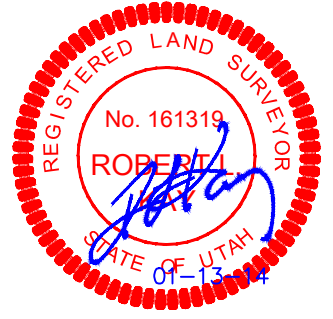
## TYPICAL CROSS SECTIONS FOR

#4-14-3-2 WELL PAD FOR  
#16-10-3-3-2WH, #1A-15-22-3-2WH,  
#13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
NW 1/4 NW 1/4

FIGURE #2

X-Section  
Scale  
1" = 40'  
1" = 100'

DATE: 05-02-13  
DRAWN BY: S.F.  
REVISED: 06-03-13  
REVISED: 06-26-13  
REVISED: 11-05-13  
REVISED: 01-13-14



## NOTE:

Topsoil should not be  
Stripped Below Finished  
Grade on Substructure Area.

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

## APPROXIMATE YARDAGES

(6") Topsoil Stripping = 6,900 Cu. Yds.  
Remaining Location = 34,870 Cu. Yds.  
TOTAL CUT = 41,770 CU. YDS.  
FILL = 33,130 CU. YDS.

EXCESS MATERIAL = 8,640 Cu. Yds.  
Topsoil & Pit Backfill = 8,640 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

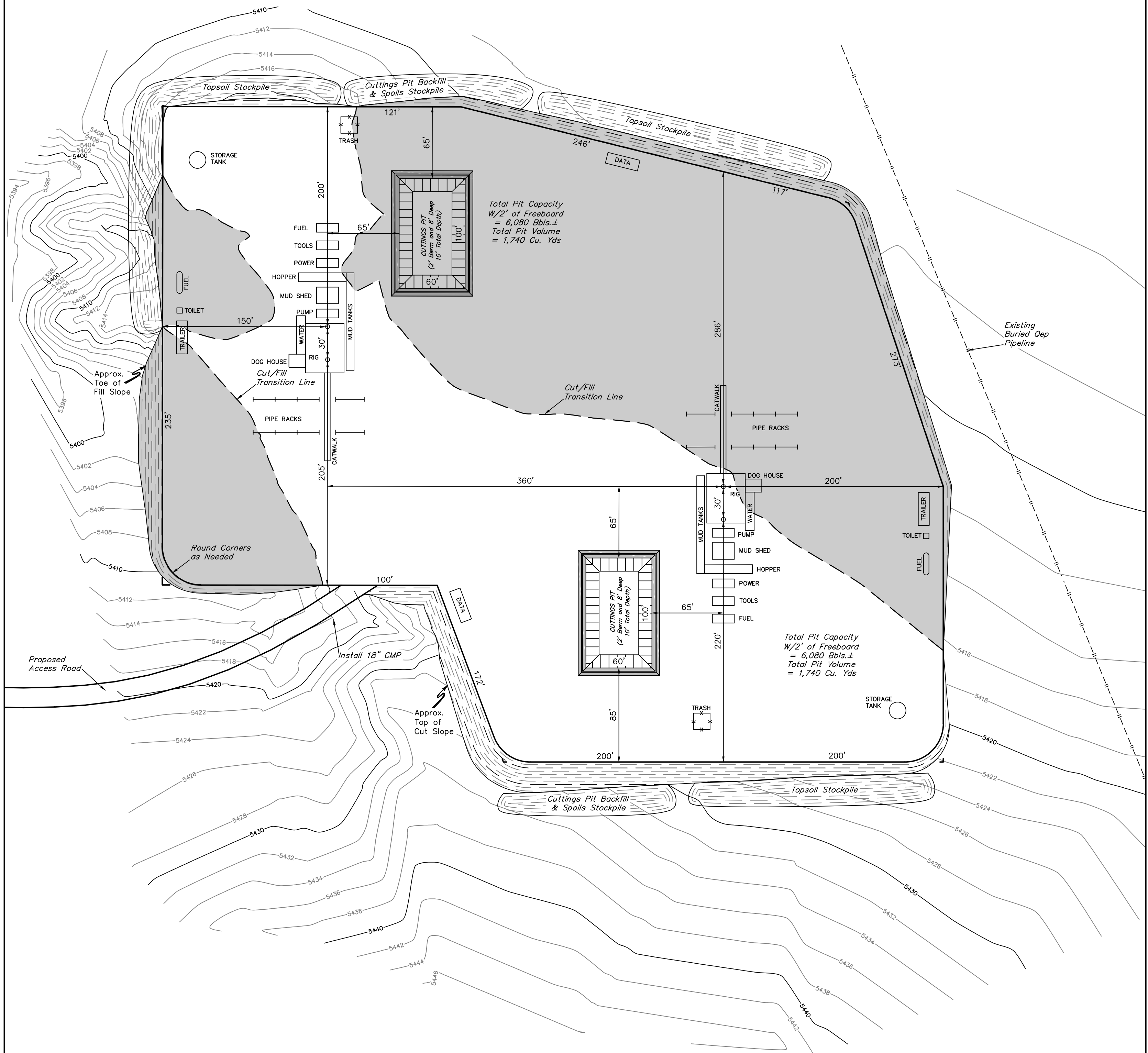
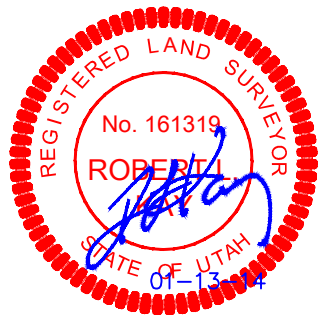
APPROXIMATE ACREAGE  
WELL SITE DISTURBANCE = ± 10.751 ACRES  
ACCESS ROAD DISTURBANCE = ± 1.796 ACRES  
PIPELINE DISTURBANCE = ± 0.111 ACRES  
TOTAL = ± 12.658 ACRES

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

RECEIVED: Jan. 15, 2014



SCALE: 1" = 60'  
DATE: 05-02-13  
DRAWN BY: S.F.  
REVISED: 06-26-13  
REVISED: 11-05-13  
REVISED: 01-13-14

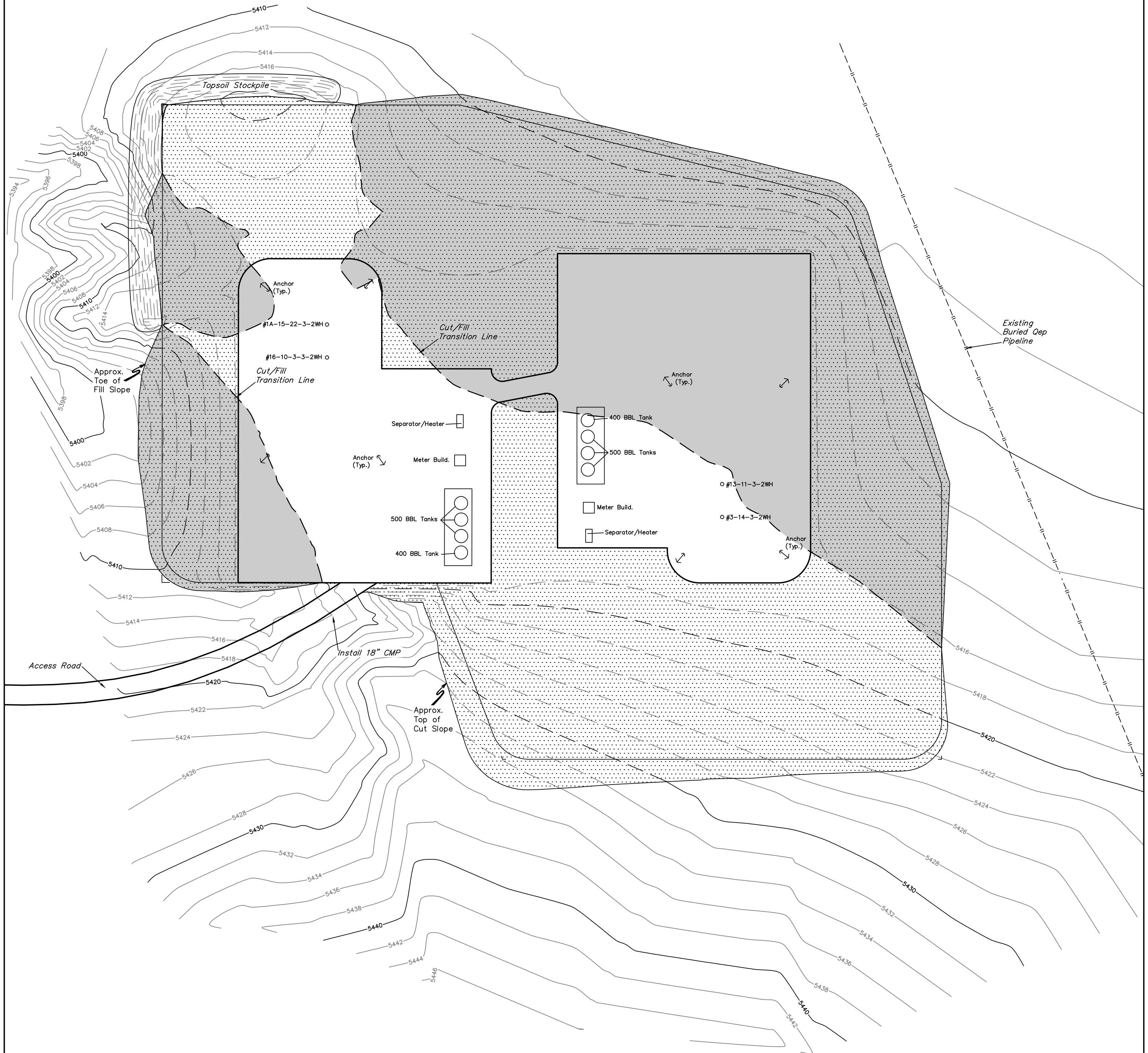
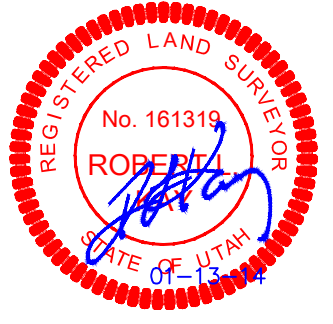


**NEWFIELD EXPLORATION COMPANY**  
**PRODUCTION FACILITY LAYOUT FOR**

#4-14-3-2 WELL PAD FOR  
 #16-10-3-3-2WH, #1A-15-22-3-2WH,  
 #13-11-3-2WH & #3-14-3-2WH  
 SECTION 14, T3S, R2W, U.S.B.&M.  
 NW 1/4 NW 1/4

**FIGURE #4**

SCALE: 1" = 60'  
 DATE: 05-02-13  
 DRAWN BY: S.F.  
 REVISED: 06-03-13  
 REVISED: 06-26-13  
 REVISED: 11-05-13  
 REVISED: 01-13-14



RECLAIMED AREA

APPROXIMATE ACREAGE  
 UN-RECLAIMED = ± 2.855 ACRES

UINTAH ENGINEERING & LAND SURVEYING  
 85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

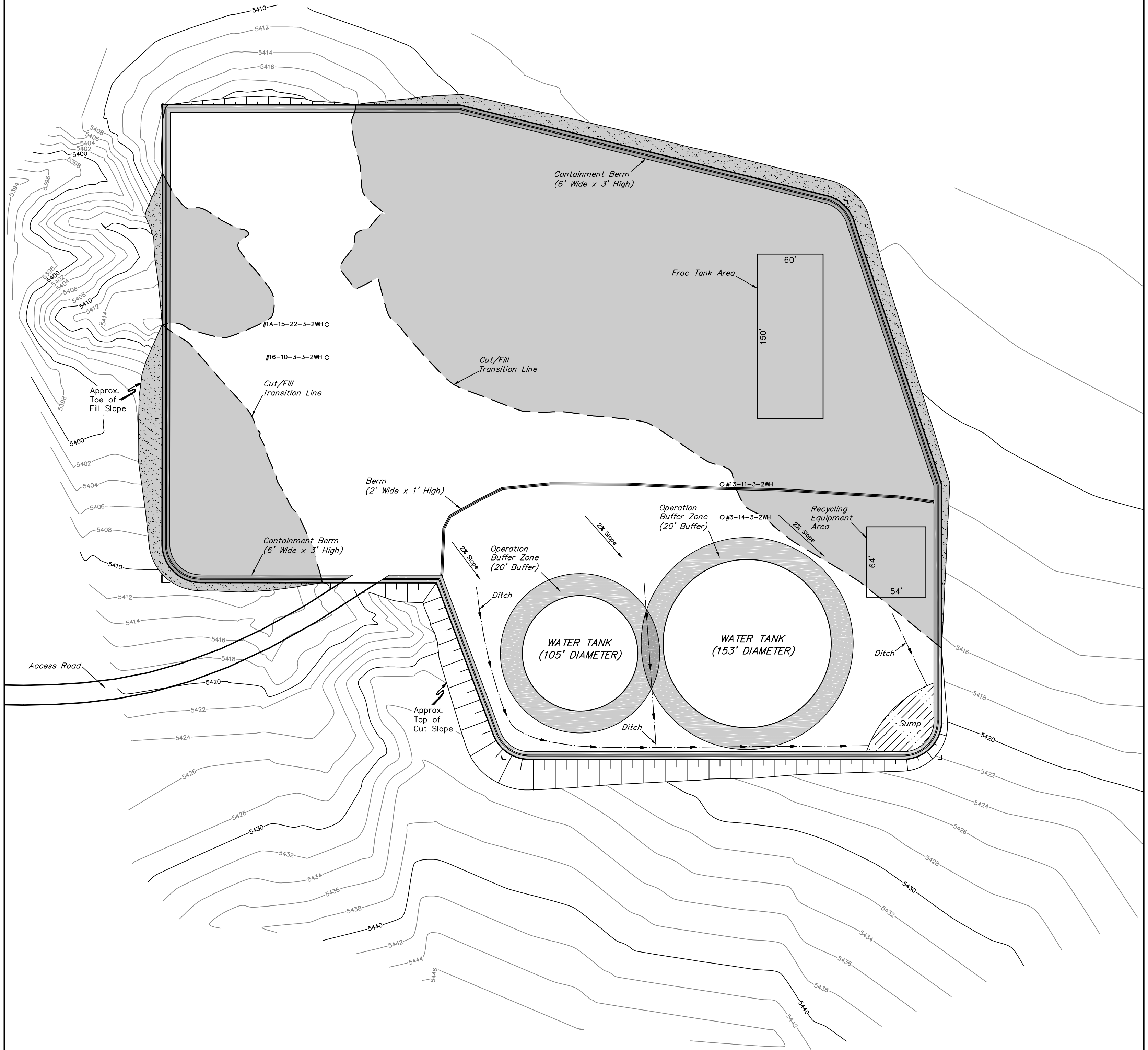
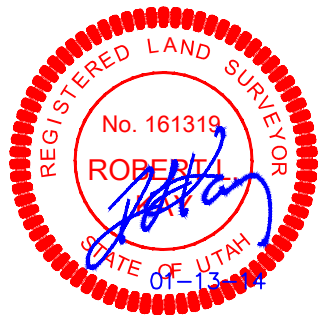
RECEIVED: Jan. 15, 2014



NEWFIELD EXPLORATION COMPANY  
RECYCLING EQUIPMENT LAYOUT FOR  
#4-14-3-2 WELL PAD FOR  
#16-10-3-3-2WH, #1A-15-22-3-2WH,  
#13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
NW 1/4 NW 1/4

FIGURE #5

SCALE: 1" = 60'  
DATE: 09-04-13  
DRAWN BY: S.F.  
REVISED: 09-17-13  
REVISED: 10-24-13  
REVISED: 11-05-13  
REVISED: 01-13-14





BEGINNING OF ROAD STA.  
0+00 BEARS S34°03'00"E  
731.16' FROM THE NORTH  
1/4 CORNER OF SECTION 15,  
T3S, R2W, U.S.B.&M.

P.O.S.L. 24+15.26 BEARS  
S00°06'54"E 577.92' FROM  
THE NORTHEAST CORNER OF  
SECTION 15, T3S, R2W,  
U.S.B.&M.

LINE TABLE			LINE TABLE			LINE TABLE		
LINE	DIRECTION	LENGTH	LINE	DIRECTION	LENGTH	LINE	DIRECTION	LENGTH
L1	S65°09'34"E	399.82'	L9	S87°29'51"E	354.51'	L17	N50°56'07"W	82.66'
L2	S67°44'58"E	202.36'	L10	S84°48'27"E	409.13'	L18	N02°23'44"W	203.97'
L3	S78°41'33"E	202.08'	L11	N78°48'45"E	54.96'	L19	N00°06'54"W	226.87'
L4	S89°41'54"E	159.22'	L12	N78°48'45"E	98.56'	L20	N39°19'07"E	50.51'
L5	N70°32'03"E	153.43'	L13	N78°27'59"E	50.76'	L21	N89°01'36"E	92.81'
L6	N38°47'57"E	200.05'	L14	N53°04'04"E	42.55'	L22	S89°52'41"E	251.82'
L7	N42°25'45"E	137.09'	L15	N53°04'04"E	63.07'			
L8	N68°01'06"E	142.61'	L16	S89°41'37"W	108.36'			

S89°51'03"W - 2626.02' (Meas.) Section Line Alum. Cap

END OF ROAD STA. 26+07.13  
BEARS S19°08'43"E 553.71' FROM  
THE NORTHWEST CORNER OF  
SECTION 14, T3S, R2W, U.S.B.&M.

William Mellema  
Jr. Trustee

BEGINNING OF PROPOSED  
ROAD RIGHT-OF-WAY  
STA. 0+00  
(At Proposed Road for  
the #13-10-3-2 Well Pad)

ROAD RIGHT-OF-WAY DESCRIPTION ON  
WILLIAM MELLEMA JR. TRUSTEE LANDS

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE NW 1/4 NE 1/4 OF SECTION 15, T3S, R2W, U.S.B.&M. WHICH BEARS  
S34°03'00"E 731.16' FROM THE NORTH 1/4 CORNER OF SAID SECTION 15, THENCE S65°09'34"E 399.82';  
THENCE S67°44'58"E 202.36'; THENCE S78°41'33"E 202.08'; THENCE S89°41'54"E 159.22'; THENCE N70°32'03"E  
153.43'; THENCE N38°47'57"E 200.05'; THENCE N42°25'45"E 137.09'; THENCE N68°01'06"E 142.61'; THENCE  
S87°29'51"E 354.51'; THENCE S84°48'27"E 409.13'; THENCE N78°48'45"E 54.96' TO A POINT ON THE EAST  
LINE OF THE NE 1/4 NE 1/4 OF SAID SECTION 15 WHICH BEARS S00°06'54"E 577.92' FROM THE NORTHEAST  
CORNER OF SAID SECTION 15. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR  
ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION.  
CONTAINS 1.663 ACRES MORE OR LESS.

SURFACE USE AREA DESCRIPTION

BEGINNING AT A POINT IN THE NW 1/4 NW 1/4 OF SECTION 14, T3S, R2W, U.S.B.&M. WHICH BEARS  
S19°08'43"E 553.71' FROM THE NORTHWEST CORNER OF SAID SECTION 14, THENCE S89°41'37"W 108.36';  
THENCE N50°56'07"W 82.66'; THENCE N02°23'44"W 203.97' TO A POINT ON THE WEST LINE OF THE NW 1/4  
NW 1/4 OF SAID SECTION 14 WHICH BEARS S00°06'54"E 267.78' FROM THE NORTHWEST CORNER OF SAID  
SECTION 14, THENCE N00°06'54"W ALONG SAID WEST LINE 226.87'; THENCE N39°19'07"E 50.51'; THENCE  
N89°01'36"E 92.81' TO A POINT ON THE NORTH LINE OF THE NW 1/4 NW 1/4 OF SAID SECTION 14 WHICH  
BEARS S89°52'41"E 124.89' FROM THE NORTHWEST CORNER OF SAID SECTION 14, THENCE S89°52'41"E ALONG  
SAID NORTH LINE 251.82'; THENCE S76°03'10"E 302.96'; THENCE S37°19'10"E 66.51'; THENCE S17°44'22"E  
281.46'; THENCE S03°11'58"W 147.28'; THENCE S06°55'00"E 105.22'; THENCE S31°12'24"W 71.13'; THENCE  
S88°08'02"W 411.54'; THENCE N38°26'46"W 54.70'; THENCE N19°13'44"W 164.22'; THENCE S89°41'37"W 83.39'  
TO THE POINT OF BEGINNING. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 10.751 ACRES MORE  
OR LESS.

LINE TABLE			LINE TABLE		
LINE	DIRECTION	LENGTH	LINE	DIRECTION	LENGTH
L23	S76°03'10"E	302.96'	L28	S31°12'24"W	71.13'
L24	S37°19'10"E	66.51'	L29	S88°08'02"W	411.54'
L25	S17°44'22"E	281.46'	L30	N38°26'46"W	54.70'
L26	S03°11'58"W	147.28'	L31	N19°13'44"W	164.22'
L27	S06°55'00"E	105.22'	L32	S89°41'37"W	83.39'

Sec. 11  
SW 1/4

NEWFIELD EXPLORATION COMPANY  
LOCATION SURFACE USE AREA  
& ROAD RIGHT-OF-WAY  
ON FEE LANDS

(For #4-14-3-2 WELL PAD FOR  
#16-10-3-3-2WH, #1A-15-22-3-2WH,  
#13-11-3-2WH & #3-14-3-2WH)

LOCATED IN SECTIONS  
14 & 15, T3S, R2W, U.S.B.&M.  
DUCHESNE COUNTY, UTAH

Bruce Dart  
Trustee

SURFACE USE AREA  
#4-14-3-2 WELL PAD FOR  
#16-10-3-3-2WH, #1A-15-22-3-2WH,  
#13-11-3-2WH & #3-14-3-2WH  
Contains 10.751 Acres

END OF PROPOSED ROAD  
RIGHT-OF-WAY  
STA. 26+07.13  
(At Edge of Surface Use Area)

Bruce Dart  
Trustee

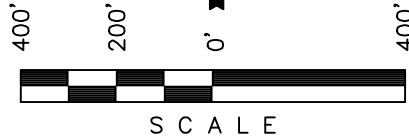
ROAD RIGHT-OF-WAY DESCRIPTION ON  
BRUCE DART TRUSTEE LANDS

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT ON THE WEST LINE OF THE NW 1/4 NW 1/4 OF  
SECTION 14, T3S, R2W, U.S.B.&M. WHICH BEARS S00°06'54"E 577.92' FROM  
THE NORTHWEST CORNER OF SAID SECTION 14, THENCE N78°48'45"E 98.56';  
THENCE N78°27'59"E 50.76'; THENCE N53°04'04"E 42.55' TO A POINT IN THE  
NW 1/4 NW 1/4 OF SAID SECTION 14 WHICH BEARS S19°08'43"E 553.71'  
FROM THE NORTHWEST CORNER OF SAID SECTION 14. THE SIDE LINES OF  
SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET  
THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S.  
OBSERVATION. CONTAINS 0.132 ACRES MORE OR LESS.

P.O.S.L. #1 BEARS S00°06'54"E 267.78' FROM THE  
NORTHWEST CORNER OF SECTION 14, T3S, R2W, U.S.B.&M.

P.O.S.L. #2 BEARS S89°52'41"E 124.89' FROM THE  
NORTHWEST CORNER OF SECTION 14, T3S, R2W, U.S.B.&M.



BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

RIGHT-OF-WAY LENGTHS

PROPERTY OWNER	FEET	ACRES	RODS
WILLIAM MELLEMA JR. TRUSTEE	2415.26	1.663	146.38
BRUCE DART TRUSTEE	191.87	0.132	11.63

▲ = SECTION CORNERS LOCATED.

△ = SECTION CORNERS RE-ESTABLISHED.  
(Not Set on Ground.)

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO  
THE BEST OF MY KNOWLEDGE AND BELIEF.

REVISED: 01-13-14  
REVISED: 11-05-13  
REVISED: 06-26-13  
REVISED: 06-03-13

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH - 200 EAST • (435) 789-1017  
VERNAL, UTAH - 84078

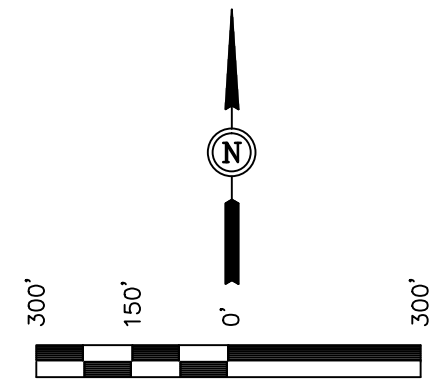
SCALE 1" = 400'	DATE 05-03-13
PARTY M.A. C.K. S.F.	REFERENCES G.L.O. PLAT
WEATHER COLD	FILE 5 4 1 8 8

## NEWFIELD EXPLORATION COMPANY

# PIPELINE RIGHT-OF-WAY ON FEE LANDS

(For #4-14-3-2 WELL PAD FOR  
#16-10-3-3-2WH, #1A-15-22-3-2WH,  
#13-11-3-2WH & #3-14-3-2WH)

LOCATED IN SECTION  
14, T3S, R2W, U.S.B.&M.  
DUCHESNE COUNTY, UTAH



SCALE  
BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

### RIGHT-OF-WAY LENGTHS

PROPERTY OWNER	FEET	ACRES	RODS
BRUCE DART TRUSTEE	161.30	0.111	9.78

▲ = SECTION CORNERS LOCATED.

△ = SECTION CORNERS RE-ESTABLISHED.  
(Not Set on Ground.)

## CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME, UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO  
THE BEST OF MY KNOWLEDGE AND BELIEF.

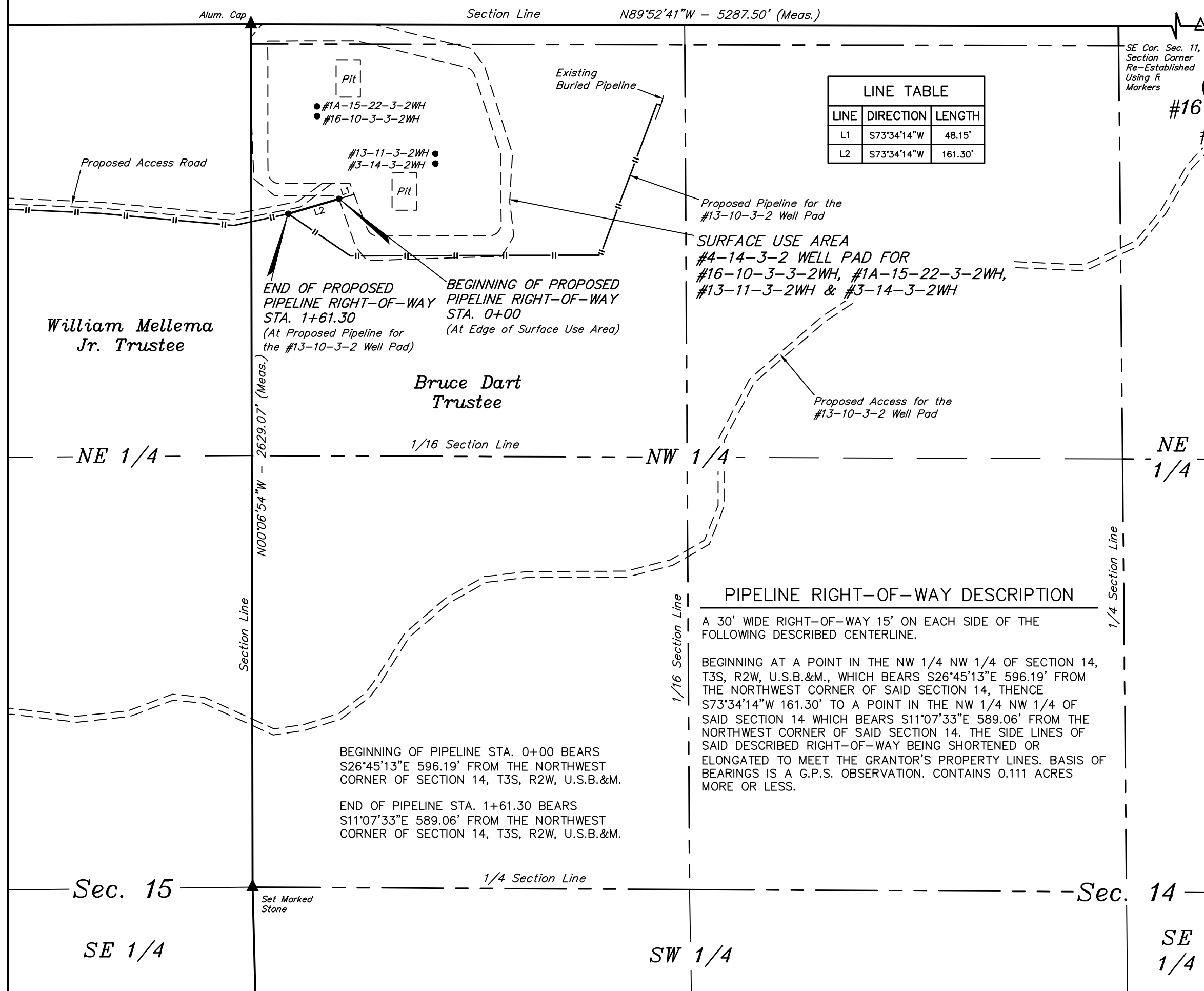
REVISED: 01-13-14  
REVISED: 11-05-13  
REVISED: 06-26-13  
REVISED: 06-03-13

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

UTAH ENGINEERING & LAND SURVEYING  
 85 SOUTH - 200 EAST • (435) 789-1017  
 VERNAL, UTAH - 84078

SCALE 1" = 400'	DATE 05-03-13
PARTY M.A. C.K. S.F.	REFERENCES G.L.O. PLAT
WEATHER COLD	FILE 5 4 1 8 9

RECEIVED: Jan. 15, 2014



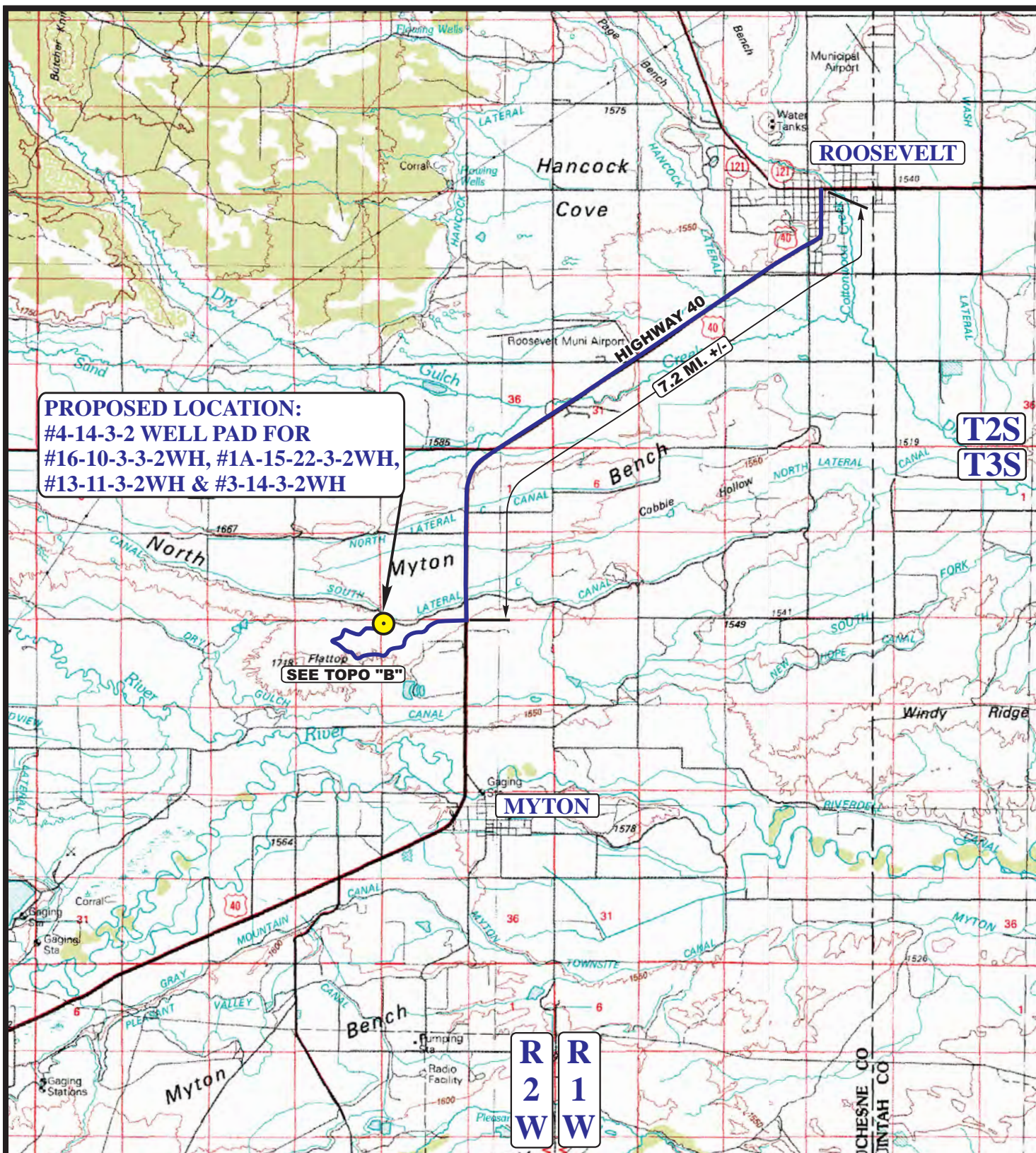
# NEWFIELD EXPLORATION COMPANY

#4-14-3-2 WELL PAD FOR  
#16-10-3-3-2-WH , #1A-15-22-3-2WH,  
#13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.

PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY, THEN SOUTHERLY DIRECTION FROM ROOSEVELT, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 7.2 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #4-15-3-2WH TO THE WEST; FOLLOW ROAD FLAGS IN A WESTERLY, THEN SOUTHWESTERLY, THEN NORTHWESTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 10,732' TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 2,670' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM ROOSEVELT, UTAH TO THE PROPOSED LOCATION IS APPROXIMATELY 9.7 MILES.





**PROPOSED LOCATION:**  
 #4-14-3-2 WELL PAD FOR  
 #16-10-3-3-2WH, #1A-15-22-3-2WH,  
 #13-11-3-2WH & #3-14-3-2WH

SEE TOPO "B"

# LEGEND:

 PROPOSED LOCATION

# NEWFIELD EXPLORATION COMPANY

#4-14-3-2 WELL PAD FOR #16-10-3-3-2WH,  
 #1A-15-22-3-2WH, #13-11-3-2WH & #3-14-3-2WH  
 SECTION 14, T3S, R2W, U.S.B.&M.  
 NW 1/4 NW 1/4



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



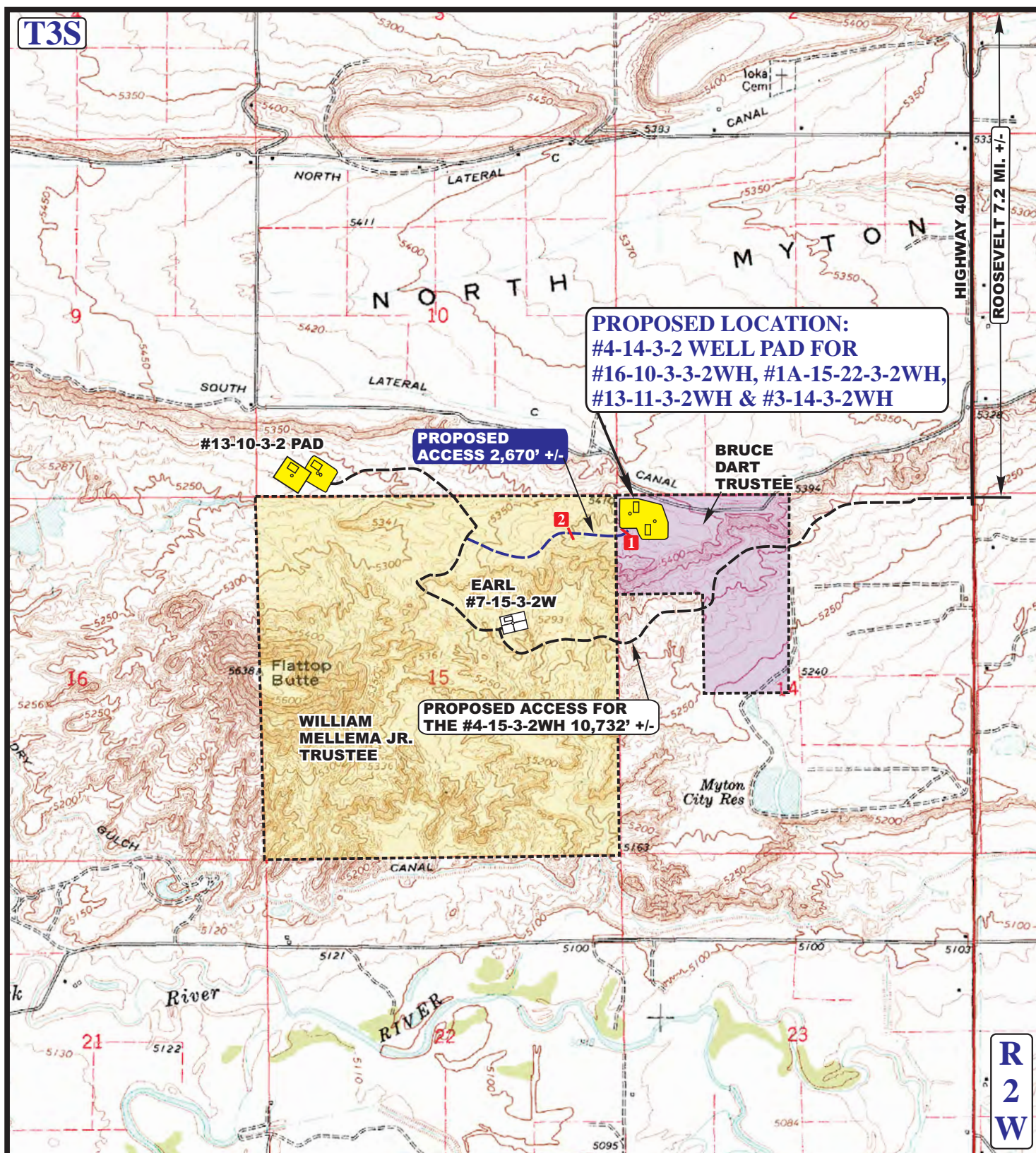
**ACCESS ROAD  
 MAP**

**11 20 12**  
 MONTH DAY YEAR

**A  
 TOPO**

SCALE: 1:100,000 DRAWN BY: C.I. REV: 01-15-14 L.S.





# LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- 1 18" CMP REQUIRED 2 24" CMP REQUIRED



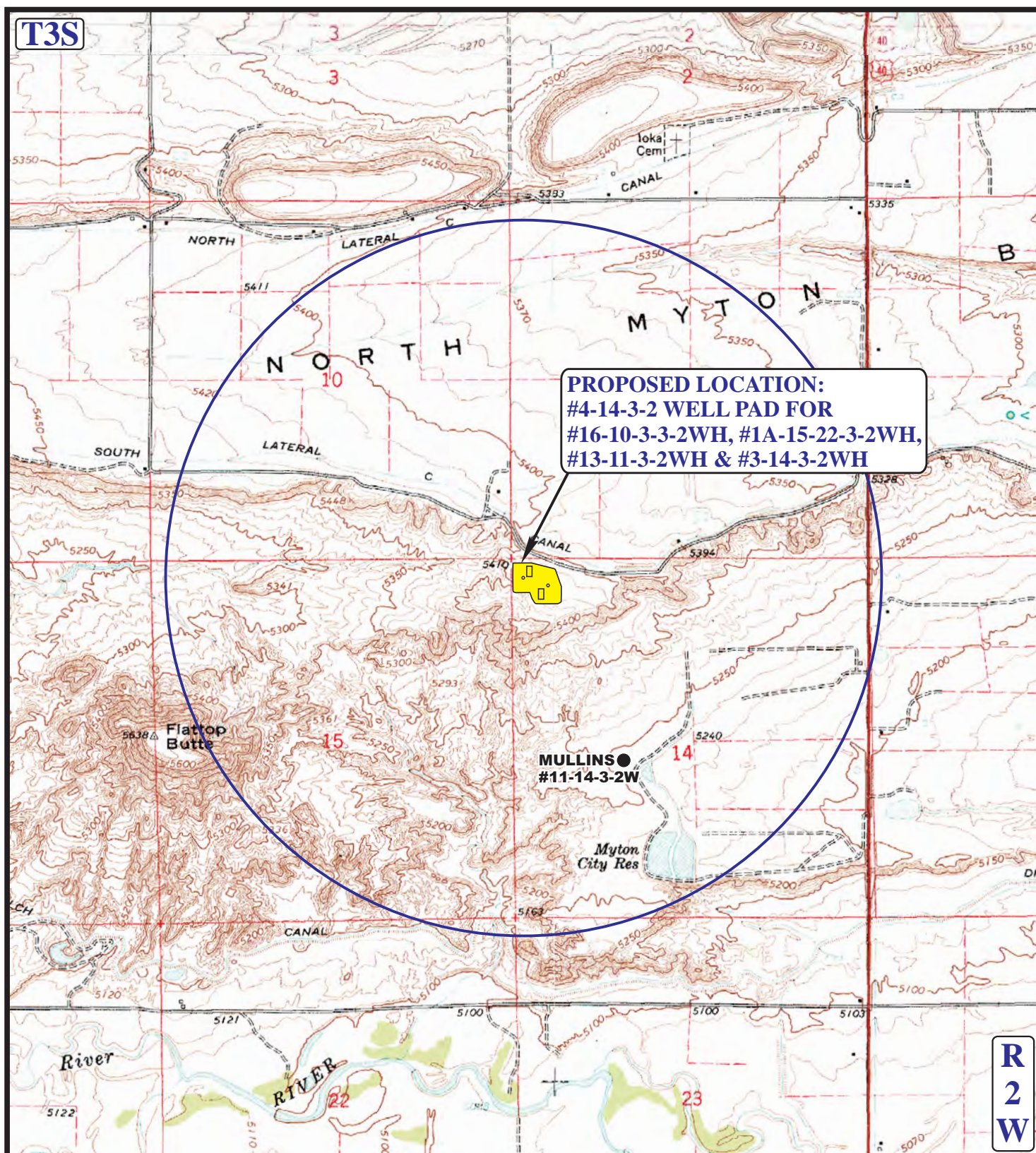
Uintah Engineering & Land Surveying  
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# NEWFIELD EXPLORATION COMPANY

#4-14-3-2 WELL PAD FOR #4-14-3-2-WH,  
#1A-15-3-2WH, #13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
NW 1/4 NW 1/4

ACCESS ROAD MAP	11 MONTH	20 DAY	12 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: C.I.	REV: 01-15-14 L.S.		





## LEGEND:

- ⊗ DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

## NEWFIELD EXPLORATION COMPANY

#4-14-3-2 WELL PAD FOR #16-10-3-3-2WH,  
#1A-15-22-3-2WH, #13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
NW 1/4 NW 1/4



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**TOPOGRAPHIC  
MAP**

**11 20 12**  
MONTH DAY YEAR

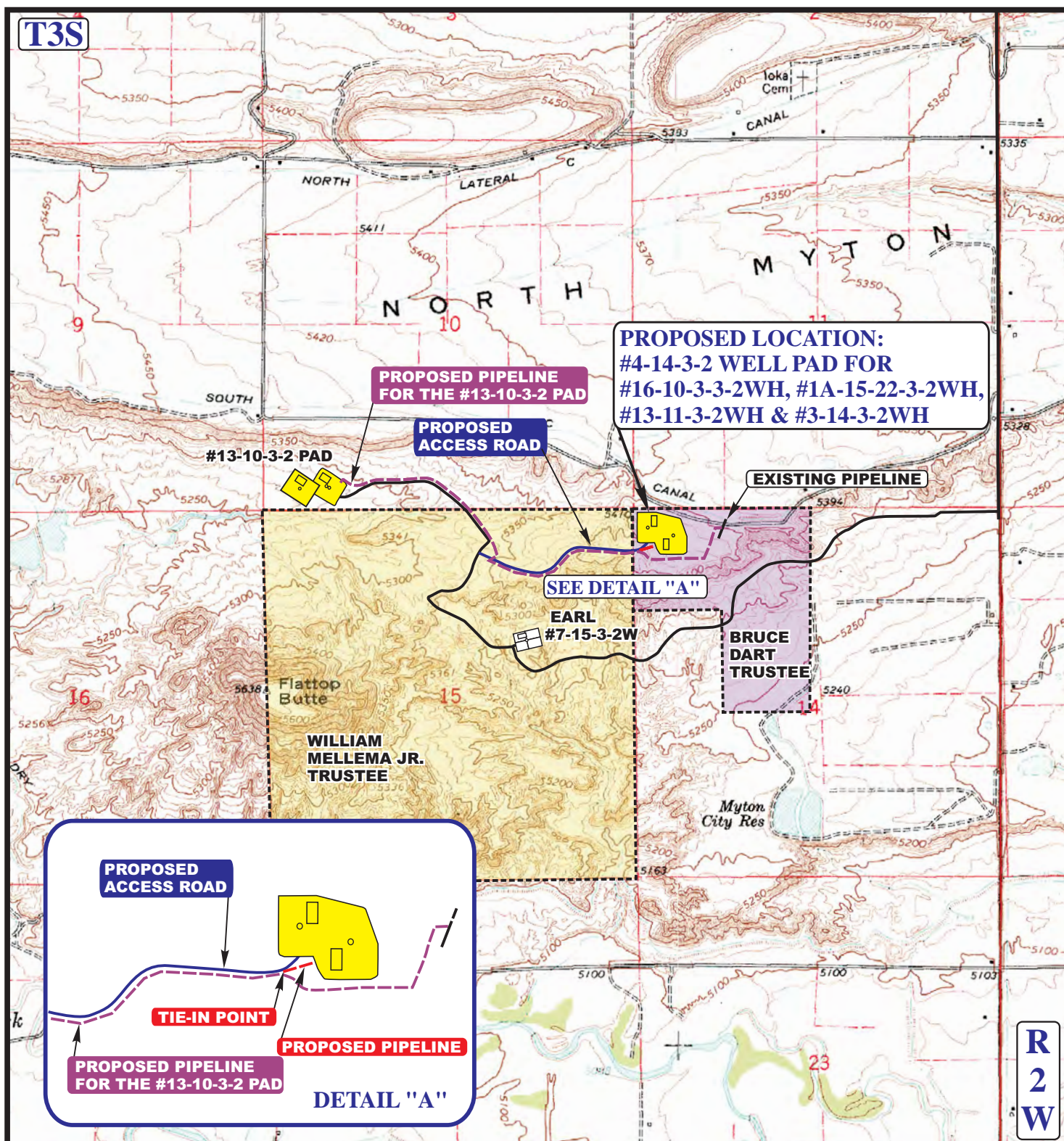
SCALE: 1" = 2000'

DRAWN BY: C.I.

REV: 01-15-14 L.S.







**APPROXIMATE TOTAL PIPELINE DISTANCE = 209' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)

**NEWFIELD EXPLORATION COMPANY**

#4-14-3-2 WELL PAD FOR #16-10-3-3-2WH,  
#1A-15-22-3-2WH, #13-11-3-2WH & #3-14-3-2WH  
SECTION 14, T3S, R2W, U.S.B.&M.  
NW 1/4 NW 1/4



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**TOPOGRAPHIC  
MAP**

SCALE: 1" = 2000'

DRAWN BY: C.I.

**11 20 12**  
MONTH DAY YEAR

REV: 01-15-14 L.S.

**D  
TOPO**



BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Pete Martin Rig #16  
Submitted By Kylan Cook Phone Number 435-790-8236  
Well Name/Number RANCH 16-10-3-3-2WH  
Qtr/Qtr NW/NW Section 14 Township 3S Range 2W  
Lease Serial Number Patented  
API Number 43-013-52172

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 01/12/2014 09:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks \_\_\_\_\_

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<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: Patented
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: RANCH 16-10-3-3-2WH	
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY	9. API NUMBER: 43013521720000	
3. ADDRESS OF OPERATOR: 1001 17th Street, Suite 2000 , Denver, CO, 80202	PHONE NUMBER: 303 382-4443 Ext	9. FIELD and POOL or WILDCAT: NORTH MYTON BENCH
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0280 FNL 0201 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 14 Township: 03.0S Range: 02.0W Meridian: U	COUNTY: DUCHESNE	
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input type="text" value="Directional Survey"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 2/6/2014			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 1/16/2014, a sundry notice was approved for the Ranch 16-10-3-3-2WH surface hole location (SHL) change. This sundry is being submitted to include the directional survey which was not included in the previous approved Sundry for SHL change.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 September 23, 2014

NAME (PLEASE PRINT) Matt Barber	PHONE NUMBER 303 382-4493	TITLE Senior Regulatory Specialist
SIGNATURE N/A		DATE 2/6/2014

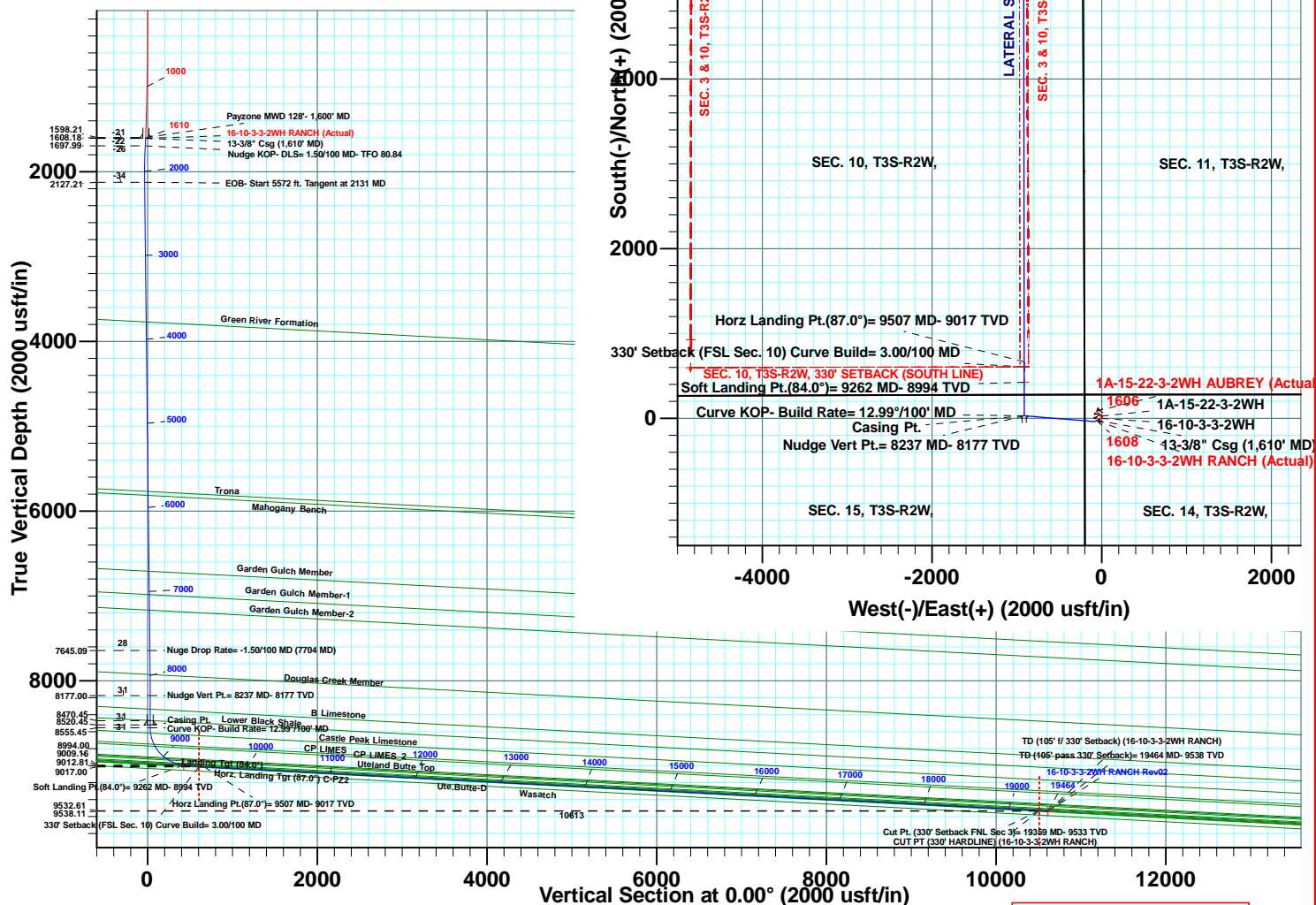
**LEAM Drilling Systems, LLC.**  
**FOR**  
**NEWFIELD EXPLORATION ROCKY MOUNTAINS**  
**WELL: 16-10-3-3-2WH RANCH (PLAN: REV02)**  
**SEC. 14, T3S-R2W, DUCHESNE CO., UTAH**  
**RIG NAME: PIONEER 78 (KB= 27')**  
**JANUARY 24, 2014 -- WELL PLAN PLOT**

WELL DETAILS: 16-10-3-3-2WH  
 Ground Level: 5416.00  
 +N/-S +E/-W Northing Easting Latitude Longitude  
 0.00 0.00 7255185.14 2035324.2940° 13' 43.640 N 110° 5' 7.930 W

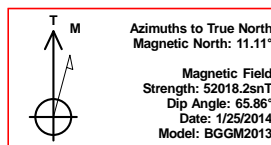
PROJECT DETAILS: DUCHESNE COUNTY, UT (NAD 83)  
 Geodetic System: US State Plane 1983  
 Ellipsoid: GRS 1980  
 Zone: Utah Central Zone  
 System Datum: Mean Sea Level



SITE DETAILS: CENTRAL BASIN (NAD 83)  
 Site Centre Latitude: 40° 13' 50.461 N  
 Longitude: 110° 5' 34.149 W  
 Positional Uncertainty: 0.00  
 Convergence: 0.90  
 Local North: True



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1610.00	3.80	221.60	1608.18	-21.62	-58.47	0.00	0.00	-21.62	
1700.00	3.80	221.60	1697.99	-26.08	-62.43	0.00	0.00	-26.08	
2131.35	8.00	274.62	2127.21	-34.36	-101.90	1.50	80.84	-34.36	
7703.52	8.00	274.62	7645.09	28.20	-875.31	0.00	0.00	28.20	
8237.16	0.00	0.00	8177.00	31.20	-912.41	1.50	180.00	31.20	
8530.61	0.00	0.00	8470.45	31.20	-912.41	0.00	0.00	31.20	
8580.61	0.00	0.00	8520.45	31.20	-912.41	0.00	0.00	31.20	
8615.61	0.00	0.00	8555.45	31.20	-912.41	0.00	0.00	31.20	
9262.10	84.00	359.92	8994.00	426.07	-912.96	12.99	359.92	426.07	
9407.10	84.00	359.92	9009.16	570.28	-913.16	0.00	0.00	570.28	
9445.77	85.16	359.92	9012.81	608.77	-913.22	3.00	0.00	608.77	
9507.10	87.00	359.92	9017.00	669.96	-913.30	3.00	0.00	669.96	
19358.92	87.00	359.92	9532.61	10508.27	-927.04	0.00	0.00	10508.27	
19464.07	87.00	359.92	9538.11	10613.27	-927.19	0.00	0.00	10613.27	



Plan: 16-10-3-3-2WH RANCH Rev02 (16-10-3-3-2WH/16-10-3-3-2WH RANCH)  
 Created By: LEAM DRILLING SYSTEMS, LLC Date: 10:22, January 24 2014  
 Checked: \_\_\_\_\_ Date: \_\_\_\_\_  
 Reviewed: \_\_\_\_\_ Date: \_\_\_\_\_  
 Approved: \_\_\_\_\_ Date: \_\_\_\_\_





## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

<b>Project</b>	DUCHESNE COUNTY, UT (NAD 83),		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		

<b>Site</b>	CENTRAL BASIN (NAD 83)		
<b>Site Position:</b>		<b>Northing:</b>	7,255,843.21 usft
<b>From:</b>	Map	<b>Easting:</b>	2,033,280.24 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	20 "
		<b>Latitude:</b>	40° 13' 50.461 N
		<b>Longitude:</b>	110° 5' 34.149 W
		<b>Grid Convergence:</b>	0.90 °

<b>Well</b>	16-10-3-3-2WH		
<b>Well Position</b>	<b>+N/-S</b>	-690.15 usft	<b>Northing:</b> 7,255,185.14 usft
	<b>+E/-W</b>	2,033.45 usft	<b>Easting:</b> 2,035,324.29 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	5,443.00 usft
		<b>Latitude:</b>	40° 13' 43.640 N
		<b>Longitude:</b>	110° 5' 7.930 W
		<b>Ground Level:</b>	5,416.00 usft

<b>Wellbore</b>	16-10-3-3-2WH RANCH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2013	1/25/2014	11.11	65.86	52,018

<b>Design</b>	16-10-3-3-2WH RANCH Rev02				
<b>Audit Notes:</b>					
<b>Version:</b>	Rev02	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	1,610.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	0.00	

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
1,610.00	3.80	221.60	1,608.18	-21.62	-58.47	0.00	0.00	0.00	0.00	
1,700.00	3.80	221.60	1,697.99	-26.08	-62.43	0.00	0.00	0.00	0.00	
2,131.35	8.00	274.62	2,127.21	-34.36	-101.90	1.50	0.97	12.29	80.84	
7,703.52	8.00	274.62	7,645.09	28.20	-875.31	0.00	0.00	0.00	0.00	
8,237.16	0.00	0.00	8,177.00	31.20	-912.41	1.50	-1.50	0.00	180.00	
8,530.61	0.00	0.00	8,470.45	31.20	-912.41	0.00	0.00	0.00	0.00	
8,580.61	0.00	0.00	8,520.45	31.20	-912.41	0.00	0.00	0.00	0.00	
8,615.61	0.00	0.00	8,555.45	31.20	-912.41	0.00	0.00	0.00	0.00	
9,262.10	84.00	359.92	8,994.00	426.07	-912.96	12.99	12.99	0.00	359.92	
9,407.10	84.00	359.92	9,009.16	570.28	-913.16	0.00	0.00	0.00	0.00	
9,445.77	85.16	359.92	9,012.81	608.77	-913.22	3.00	3.00	0.00	0.00	
9,507.10	87.00	359.92	9,017.00	669.96	-913.30	3.00	3.00	0.00	0.00	
19,358.92	87.00	359.92	9,532.61	10,508.27	-927.04	0.00	0.00	0.00	0.00	CUT PT (330' HARI
19,464.07	87.00	359.92	9,538.11	10,613.27	-927.19	0.00	0.00	0.00	0.00	TD (105' f/ 330' Set



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>SEC. 10, T3S-R2W, 330' SETBACK (SOUTH LINE) - SEC. 14, T3S-R2W,</b>									
1.45	0.01	12.50	1.45	0.00	0.00	0.00	0.55	0.55	0.00
<b>LATERAL TARGET BOX (16-10-3-3-2WH)</b>									
76.45	0.42	12.50	76.45	0.27	0.06	0.27	0.55	0.55	0.00
<b>SEC. 3 &amp; 10, T3S-R2W, 660' SETBACK (WEST LINE)</b>									
81.46	0.45	12.50	81.46	0.31	0.07	0.31	0.55	0.55	0.00
<b>SEC. 3 &amp; 10, T3S-R2W, 660' SETBACK (EAST LINE)</b>									
111.60	0.61	12.50	111.60	0.58	0.13	0.58	0.55	0.55	0.00
<b>SEC. 10, T3S-R2W,</b>									
128.00	0.70	12.50	128.00	0.76	0.17	0.76	0.55	0.55	0.00
157.00	0.90	352.90	156.99	1.16	0.18	1.16	1.16	0.69	-67.59
173.28	0.99	359.15	173.27	1.43	0.16	1.43	0.86	0.58	38.39
<b>SEC. 3, T3S-R2W,</b>									
190.00	1.10	4.40	189.99	1.74	0.17	1.74	0.86	0.64	31.40
217.00	1.10	351.30	216.98	2.25	0.15	2.25	0.93	0.00	-48.52
245.00	0.90	347.70	244.98	2.73	0.06	2.73	0.75	-0.71	-12.86
273.00	1.00	329.50	272.98	3.16	-0.11	3.16	1.13	0.36	-65.00
301.00	0.80	310.90	300.97	3.49	-0.38	3.49	1.26	-0.71	-66.43
329.00	1.10	280.90	328.97	3.67	-0.79	3.67	2.04	1.07	-107.14
359.00	1.20	275.50	358.96	3.76	-1.38	3.76	0.49	0.33	-18.00
386.00	1.10	270.80	385.96	3.79	-1.93	3.79	0.51	-0.37	-17.41
411.00	1.40	269.40	410.95	3.79	-2.47	3.79	1.21	1.20	-5.60
439.00	1.30	261.60	438.94	3.74	-3.13	3.74	0.75	-0.36	-27.86
470.00	1.60	252.60	469.93	3.56	-3.89	3.56	1.21	0.97	-29.03
500.00	1.50	255.50	499.92	3.33	-4.67	3.33	0.42	-0.33	9.67
530.00	1.50	249.00	529.91	3.10	-5.41	3.10	0.57	0.00	-21.67
560.00	1.60	245.90	559.90	2.78	-6.16	2.78	0.43	0.33	-10.33
590.00	1.90	241.40	589.89	2.37	-6.98	2.37	1.10	1.00	-15.00
620.00	1.90	241.00	619.87	1.90	-7.85	1.90	0.04	0.00	-1.33
650.00	2.30	240.10	649.85	1.35	-8.81	1.35	1.34	1.33	-3.00
680.00	2.60	236.90	679.82	0.68	-9.90	0.68	1.10	1.00	-10.67
710.00	2.60	240.00	709.79	-0.03	-11.06	-0.03	0.47	0.00	10.33
740.00	2.80	240.60	739.76	-0.73	-12.29	-0.73	0.67	0.67	2.00
770.00	3.00	240.50	769.72	-1.48	-13.61	-1.48	0.67	0.67	-0.33
800.00	3.50	237.70	799.67	-2.35	-15.07	-2.35	1.75	1.67	-9.33
830.00	4.00	238.30	829.61	-3.39	-16.73	-3.39	1.67	1.67	2.00
860.00	4.00	245.10	859.54	-4.38	-18.57	-4.38	1.58	0.00	22.67
890.00	3.60	246.30	889.47	-5.20	-20.38	-5.20	1.36	-1.33	4.00
920.00	2.90	246.30	919.42	-5.88	-21.94	-5.88	2.33	-2.33	0.00
950.00	2.50	247.40	949.39	-6.44	-23.24	-6.44	1.34	-1.33	3.67
980.00	2.40	251.00	979.36	-6.90	-24.44	-6.90	0.61	-0.33	12.00
1,010.00	2.50	258.80	1,009.33	-7.23	-25.67	-7.23	1.16	0.33	26.00
1,040.00	2.50	259.30	1,039.30	-7.48	-26.96	-7.48	0.07	0.00	1.67
1,070.00	2.80	255.90	1,069.27	-7.78	-28.31	-7.78	1.13	1.00	-11.33
1,100.00	3.30	255.40	1,099.23	-8.17	-29.86	-8.17	1.67	1.67	-1.67
1,130.00	3.30	259.70	1,129.18	-8.54	-31.54	-8.54	0.82	0.00	14.33
1,160.00	3.50	260.00	1,159.13	-8.86	-33.29	-8.86	0.67	0.67	1.00
1,190.00	3.70	259.30	1,189.07	-9.20	-35.15	-9.20	0.68	0.67	-2.33
1,220.00	4.20	257.80	1,219.00	-9.61	-37.17	-9.61	1.70	1.67	-5.00
1,250.00	4.10	258.60	1,248.92	-10.05	-39.30	-10.05	0.39	-0.33	2.67



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,280.00	4.00	256.80	1,278.84	-10.50	-41.37	-10.50	0.54	-0.33	-6.00
1,310.00	4.30	256.10	1,308.76	-11.01	-43.48	-11.01	1.01	1.00	-2.33
1,340.00	4.10	248.50	1,338.68	-11.68	-45.57	-11.68	1.97	-0.67	-25.33
1,370.00	3.50	240.70	1,368.62	-12.52	-47.36	-12.52	2.64	-2.00	-26.00
1,400.00	3.50	238.90	1,398.56	-13.44	-48.95	-13.44	0.37	0.00	-6.00
1,430.00	3.50	234.00	1,428.51	-14.45	-50.47	-14.45	1.00	0.00	-16.33
1,460.00	3.30	229.10	1,458.45	-15.55	-51.87	-15.55	1.18	-0.67	-16.33
1,490.00	3.30	231.30	1,488.40	-16.66	-53.19	-16.66	0.42	0.00	7.33
1,520.00	3.30	230.40	1,518.35	-17.75	-54.53	-17.75	0.17	0.00	-3.00
1,550.00	3.30	227.10	1,548.30	-18.89	-55.83	-18.89	0.63	0.00	-11.00
1,580.00	3.70	224.30	1,578.25	-20.17	-57.14	-20.17	1.45	1.33	-9.33
1,600.00	3.80	221.60	1,598.21	-21.12	-58.03	-21.12	1.01	0.50	-13.50
1,610.00	3.80	221.60	1,608.18	-21.62	-58.47	-21.62	0.00	0.00	0.00
<b>Start 90 ft. Tangent at 1610 MD</b>									
1,700.00	3.80	221.60	1,697.99	-26.08	-62.43	-26.08	0.00	0.00	0.00
<b>Nudge KOP- DLS= 1.50/100 MD- TFO 80.84</b>									
1,800.00	4.30	241.75	1,797.74	-30.33	-67.93	-30.33	1.50	0.50	20.15
1,900.00	5.20	256.34	1,897.40	-33.18	-75.64	-33.18	1.50	0.90	14.59
2,000.00	6.33	266.20	1,996.89	-34.61	-85.55	-34.61	1.50	1.13	9.86
2,100.00	7.59	272.95	2,096.16	-34.64	-97.65	-34.64	1.50	1.26	6.75
2,131.35	8.00	274.62	2,127.21	-34.36	-101.90	-34.36	1.50	1.31	5.33
<b>EOB- Start 5572 ft. Tangent at 2131 MD</b>									
2,200.00	8.00	274.62	2,195.20	-33.59	-111.42	-33.59	0.00	0.00	0.00
2,300.00	8.00	274.62	2,294.22	-32.46	-125.30	-32.46	0.00	0.00	0.00
2,400.00	8.00	274.62	2,393.25	-31.34	-139.18	-31.34	0.00	0.00	0.00
2,500.00	8.00	274.62	2,492.27	-30.22	-153.06	-30.22	0.00	0.00	0.00
2,600.00	8.00	274.62	2,591.30	-29.10	-166.94	-29.10	0.00	0.00	0.00
2,700.00	8.00	274.62	2,690.33	-27.97	-180.82	-27.97	0.00	0.00	0.00
2,800.00	8.00	274.62	2,789.35	-26.85	-194.70	-26.85	0.00	0.00	0.00
2,900.00	8.00	274.62	2,888.38	-25.73	-208.58	-25.73	0.00	0.00	0.00
3,000.00	8.00	274.62	2,987.40	-24.61	-222.46	-24.61	0.00	0.00	0.00
3,100.00	8.00	274.62	3,086.43	-23.48	-236.35	-23.48	0.00	0.00	0.00
3,200.00	8.00	274.62	3,185.45	-22.36	-250.23	-22.36	0.00	0.00	0.00
3,300.00	8.00	274.62	3,284.48	-21.24	-264.11	-21.24	0.00	0.00	0.00
3,400.00	8.00	274.62	3,383.51	-20.11	-277.99	-20.11	0.00	0.00	0.00
3,500.00	8.00	274.62	3,482.53	-18.99	-291.87	-18.99	0.00	0.00	0.00
3,600.00	8.00	274.62	3,581.56	-17.87	-305.75	-17.87	0.00	0.00	0.00
3,700.00	8.00	274.62	3,680.58	-16.75	-319.63	-16.75	0.00	0.00	0.00
3,791.49	8.00	274.62	3,771.18	-15.72	-332.32	-15.72	0.00	0.00	0.00
<b>Green River Formation</b>									
3,800.00	8.00	274.62	3,779.61	-15.62	-333.51	-15.62	0.00	0.00	0.00
3,900.00	8.00	274.62	3,878.63	-14.50	-347.39	-14.50	0.00	0.00	0.00
4,000.00	8.00	274.62	3,977.66	-13.38	-361.27	-13.38	0.00	0.00	0.00
4,100.00	8.00	274.62	4,076.69	-12.26	-375.15	-12.26	0.00	0.00	0.00
4,200.00	8.00	274.62	4,175.71	-11.13	-389.03	-11.13	0.00	0.00	0.00
4,300.00	8.00	274.62	4,274.74	-10.01	-402.91	-10.01	0.00	0.00	0.00
4,400.00	8.00	274.62	4,373.76	-8.89	-416.79	-8.89	0.00	0.00	0.00
4,500.00	8.00	274.62	4,472.79	-7.77	-430.67	-7.77	0.00	0.00	0.00
4,600.00	8.00	274.62	4,571.81	-6.64	-444.55	-6.64	0.00	0.00	0.00
4,700.00	8.00	274.62	4,670.84	-5.52	-458.43	-5.52	0.00	0.00	0.00
4,800.00	8.00	274.62	4,769.86	-4.40	-472.31	-4.40	0.00	0.00	0.00
4,900.00	8.00	274.62	4,868.89	-3.27	-486.19	-3.27	0.00	0.00	0.00





## Planning Report



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<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,000.00	8.00	274.62	4,967.92	-2.15	-500.07	-2.15	0.00	0.00	0.00
5,100.00	8.00	274.62	5,066.94	-1.03	-513.95	-1.03	0.00	0.00	0.00
5,200.00	8.00	274.62	5,165.97	0.09	-527.83	0.09	0.00	0.00	0.00
5,300.00	8.00	274.62	5,264.99	1.22	-541.71	1.22	0.00	0.00	0.00
5,400.00	8.00	274.62	5,364.02	2.34	-555.59	2.34	0.00	0.00	0.00
5,500.00	8.00	274.62	5,463.04	3.46	-569.47	3.46	0.00	0.00	0.00
5,600.00	8.00	274.62	5,562.07	4.58	-583.35	4.58	0.00	0.00	0.00
5,700.00	8.00	274.62	5,661.10	5.71	-597.23	5.71	0.00	0.00	0.00
5,800.00	8.00	274.62	5,760.12	6.83	-611.11	6.83	0.00	0.00	0.00
5,811.35	8.00	274.62	5,771.36	6.96	-612.68	6.96	0.00	0.00	0.00
<b>Trona</b>									
5,856.82	8.00	274.62	5,816.39	7.47	-618.99	7.47	0.00	0.00	0.00
<b>Mahogany Bench</b>									
5,900.00	8.00	274.62	5,859.15	7.95	-624.99	7.95	0.00	0.00	0.00
6,000.00	8.00	274.62	5,958.17	9.07	-638.87	9.07	0.00	0.00	0.00
6,100.00	8.00	274.62	6,057.20	10.20	-652.75	10.20	0.00	0.00	0.00
6,200.00	8.00	274.62	6,156.22	11.32	-666.63	11.32	0.00	0.00	0.00
6,300.00	8.00	274.62	6,255.25	12.44	-680.51	12.44	0.00	0.00	0.00
6,400.00	8.00	274.62	6,354.28	13.57	-694.39	13.57	0.00	0.00	0.00
6,500.00	8.00	274.62	6,453.30	14.69	-708.27	14.69	0.00	0.00	0.00
6,600.00	8.00	274.62	6,552.33	15.81	-722.15	15.81	0.00	0.00	0.00
6,700.00	8.00	274.62	6,651.35	16.93	-736.03	16.93	0.00	0.00	0.00
6,760.16	8.00	274.62	6,710.92	17.61	-744.38	17.61	0.00	0.00	0.00
<b>Garden Gulch Member</b>									
6,800.00	8.00	274.62	6,750.38	18.06	-749.91	18.06	0.00	0.00	0.00
6,900.00	8.00	274.62	6,849.40	19.18	-763.79	19.18	0.00	0.00	0.00
7,000.00	8.00	274.62	6,948.43	20.30	-777.67	20.30	0.00	0.00	0.00
7,038.03	8.00	274.62	6,986.09	20.73	-782.94	20.73	0.00	0.00	0.00
<b>Garden Gulch Member-1</b>									
7,100.00	8.00	274.62	7,047.46	21.42	-791.55	21.42	0.00	0.00	0.00
7,200.00	8.00	274.62	7,146.48	22.55	-805.43	22.55	0.00	0.00	0.00
7,223.95	8.00	274.62	7,170.20	22.82	-808.75	22.82	0.00	0.00	0.00
<b>Garden Gulch Member-2</b>									
7,300.00	8.00	274.62	7,245.51	23.67	-819.31	23.67	0.00	0.00	0.00
7,400.00	8.00	274.62	7,344.53	24.79	-833.19	24.79	0.00	0.00	0.00
7,500.00	8.00	274.62	7,443.56	25.91	-847.07	25.91	0.00	0.00	0.00
7,600.00	8.00	274.62	7,542.58	27.04	-860.95	27.04	0.00	0.00	0.00
7,703.52	8.00	274.62	7,645.09	28.20	-875.31	28.20	0.00	0.00	0.00
<b>Nuge Drop Rate= -1.50/100 MD (7704 MD)</b>									
7,800.00	6.56	274.62	7,740.79	29.19	-887.50	29.19	1.50	-1.50	0.00
7,900.00	5.06	274.62	7,840.28	30.00	-897.59	30.00	1.50	-1.50	0.00
7,987.58	3.74	274.62	7,927.60	30.54	-904.29	30.54	1.50	-1.50	0.00
<b>Douglas Creek Member</b>									
8,000.00	3.56	274.62	7,939.99	30.61	-905.07	30.61	1.50	-1.50	0.00
8,100.00	2.06	274.62	8,039.87	31.00	-909.96	31.00	1.50	-1.50	0.00
8,200.00	0.56	274.62	8,139.84	31.19	-912.23	31.19	1.50	-1.50	0.00
8,237.16	0.00	0.00	8,177.00	31.20	-912.41	31.20	1.50	-1.50	0.00
<b>Nudge Vert Pt.= 8237 MD- 8177 TVD</b>									
8,300.00	0.00	0.00	8,239.84	31.20	-912.41	31.20	0.00	0.00	0.00
8,395.79	0.00	0.00	8,335.64	31.20	-912.41	31.20	0.00	0.00	0.00
<b>B Limestone</b>									



## Planning Report



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<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,400.00	0.00	0.00	8,339.84	31.20	-912.41	31.20	0.00	0.00	0.00
8,500.00	0.00	0.00	8,439.84	31.20	-912.41	31.20	0.00	0.00	0.00
8,530.61	0.00	0.00	8,470.45	31.20	-912.41	31.20	0.00	0.00	0.00
<b>Start 50 ft. Tangent at 8531 MD- 8470 TVD</b>									
8,530.79	0.00	0.00	8,470.64	31.20	-912.41	31.20	0.00	0.00	0.00
<b>Lower Black Shale</b>									
8,580.16	0.00	0.00	8,520.00	31.20	-912.41	31.20	0.00	0.00	0.00
<b>Casing Pt.</b>									
8,580.61	0.00	0.00	8,520.45	31.20	-912.41	31.20	0.00	0.00	0.00
<b>Start 35 ft. Tangent at 8581 MD- 8520 TVD</b>									
8,600.00	0.00	0.00	8,539.84	31.20	-912.41	31.20	0.00	0.00	0.00
8,615.61	0.00	0.00	8,555.45	31.20	-912.41	31.20	0.00	0.00	0.00
<b>Curve KOP- Build Rate= 12.99°/100' MD</b>									
8,625.00	1.22	359.92	8,564.84	31.30	-912.41	31.30	12.99	12.99	0.00
8,650.00	4.47	359.92	8,589.81	32.54	-912.41	32.54	12.99	12.99	0.00
8,675.00	7.72	359.92	8,614.66	35.19	-912.42	35.19	12.99	12.99	0.00
8,678.24	8.14	359.92	8,617.87	35.64	-912.42	35.64	12.99	12.99	0.00
<b>Castle Peak Limestone</b>									
8,700.00	10.97	359.92	8,639.33	39.25	-912.42	39.25	12.99	12.99	0.00
8,725.00	14.21	359.92	8,663.72	44.70	-912.43	44.70	12.99	12.99	0.00
8,750.00	17.46	359.92	8,687.77	51.52	-912.44	51.52	12.99	12.99	0.00
8,775.00	20.71	359.92	8,711.39	59.69	-912.45	59.69	12.99	12.99	0.00
8,800.00	23.96	359.92	8,734.51	69.19	-912.46	69.19	12.99	12.99	0.00
8,818.25	26.33	359.92	8,751.03	76.95	-912.47	76.95	12.99	12.99	0.00
<b>CP LIMES</b>									
8,825.00	27.21	359.92	8,757.06	79.99	-912.48	79.99	12.99	12.99	0.00
8,845.07	29.81	359.92	8,774.69	89.57	-912.49	89.57	12.99	12.99	0.00
<b>CP LIMES_2</b>									
8,850.00	30.45	359.92	8,778.96	92.04	-912.49	92.04	12.99	12.99	0.00
8,875.00	33.70	359.92	8,800.14	105.32	-912.51	105.32	12.99	12.99	0.00
8,900.00	36.95	359.92	8,820.53	119.77	-912.53	119.77	12.99	12.99	0.00
8,925.00	40.20	359.92	8,840.07	135.36	-912.56	135.36	12.99	12.99	0.00
8,950.00	43.45	359.92	8,858.70	152.03	-912.58	152.03	12.99	12.99	0.00
8,975.00	46.70	359.92	8,876.35	169.72	-912.60	169.72	12.99	12.99	0.00
9,000.00	49.94	359.92	8,892.98	188.39	-912.63	188.39	12.99	12.99	0.00
9,025.00	53.19	359.92	8,908.51	207.97	-912.66	207.97	12.99	12.99	0.00
9,025.69	53.28	359.92	8,908.93	208.53	-912.66	208.53	12.99	12.99	0.00
<b>Uteland Butte Top</b>									
9,046.21	55.95	359.92	8,920.81	225.25	-912.68	225.25	12.99	12.99	0.00
<b>Ute.Butte-A</b>									
9,050.00	56.44	359.92	8,922.92	228.40	-912.69	228.40	12.99	12.99	0.00
9,074.88	59.67	359.92	8,936.08	249.51	-912.71	249.51	12.99	12.99	0.00
<b>Ute.Butte-B</b>									
9,075.00	59.69	359.92	8,936.14	249.62	-912.71	249.62	12.99	12.99	0.00
9,100.00	62.94	359.92	8,948.14	271.55	-912.75	271.55	12.99	12.99	0.00
9,125.00	66.19	359.92	8,958.87	294.12	-912.78	294.12	12.99	12.99	0.00
9,150.00	69.43	359.92	8,968.31	317.27	-912.81	317.27	12.99	12.99	0.00
9,151.04	69.57	359.92	8,968.68	318.24	-912.81	318.24	12.99	12.99	0.00
<b>Ute.Butte-C</b>									
9,175.00	72.68	359.92	8,976.43	340.91	-912.84	340.91	12.99	12.99	0.00
9,199.68	75.89	359.92	8,983.11	364.66	-912.88	364.66	12.99	12.99	0.00



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>Ute.Butte_C-PZ1</b>									
9,200.00	75.93	359.92	8,983.19	364.97	-912.88	364.97	12.99	12.99	0.00
9,225.00	79.18	359.92	8,988.58	389.38	-912.91	389.38	12.99	12.99	0.00
9,250.00	82.43	359.92	8,992.57	414.06	-912.94	414.06	12.99	12.99	0.00
9,262.10	84.00	359.92	8,994.00	426.07	-912.96	426.07	12.99	12.99	0.00
<b>Soft Landing Pt.(84.0°)= 9262 MD- 8994 TVD</b>									
9,262.77	84.00	359.92	8,994.07	426.74	-912.96	426.74	0.00	0.00	0.00
<b>Soft Land Pt (84.0°) (16-10-3-3-2WH)</b>									
9,268.39	84.00	359.92	8,994.66	432.32	-912.97	432.32	0.00	0.00	0.00
<b>Landing Tgt (84.0°)</b>									
9,300.00	84.00	359.92	8,997.96	463.77	-913.01	463.77	0.00	0.00	0.00
9,407.10	84.00	359.92	9,009.16	570.28	-913.16	570.28	0.00	0.00	0.00
<b>Curve Build Rate= 3.00°/100 MD</b>									
9,445.77	85.16	359.92	9,012.81	608.77	-913.22	608.77	3.00	3.00	0.00
<b>330' Setback (FSL Sec. 10) Curve Build= 3.00/100 MD</b>									
9,445.81	85.16	359.92	9,012.81	608.82	-913.22	608.82	0.00	0.00	0.00
<b>Top Prod.(16-10-3-3-2WH RANCH)</b>									
9,507.10	87.00	359.92	9,017.00	669.96	-913.30	669.96	3.00	3.00	0.00
<b>Horz Landing Pt.(87.0°)= 9507 MD- 9017 TVD</b>									
9,600.00	87.00	359.92	9,021.86	762.73	-913.43	762.73	0.00	0.00	0.00
9,700.00	87.00	359.92	9,027.10	862.59	-913.57	862.59	0.00	0.00	0.00
9,800.00	87.00	359.92	9,032.33	962.46	-913.71	962.46	0.00	0.00	0.00
9,900.00	87.00	359.92	9,037.56	1,062.32	-913.85	1,062.32	0.00	0.00	0.00
10,000.00	87.00	359.92	9,042.80	1,162.18	-913.99	1,162.18	0.00	0.00	0.00
10,100.00	87.00	359.92	9,048.03	1,262.05	-914.13	1,262.05	0.00	0.00	0.00
10,200.00	87.00	359.92	9,053.27	1,361.91	-914.27	1,361.91	0.00	0.00	0.00
10,300.00	87.00	359.92	9,058.50	1,461.77	-914.41	1,461.77	0.00	0.00	0.00
10,400.00	87.00	359.92	9,063.73	1,561.63	-914.55	1,561.63	0.00	0.00	0.00
10,500.00	87.00	359.92	9,068.97	1,661.50	-914.69	1,661.50	0.00	0.00	0.00
10,600.00	87.00	359.92	9,074.20	1,761.36	-914.83	1,761.36	0.00	0.00	0.00
10,700.00	87.00	359.92	9,079.43	1,861.22	-914.97	1,861.22	0.00	0.00	0.00
10,800.00	87.00	359.92	9,084.67	1,961.09	-915.10	1,961.09	0.00	0.00	0.00
10,900.00	87.00	359.92	9,089.90	2,060.95	-915.24	2,060.95	0.00	0.00	0.00
11,000.00	87.00	359.92	9,095.13	2,160.81	-915.38	2,160.81	0.00	0.00	0.00
11,100.00	87.00	359.92	9,100.37	2,260.67	-915.52	2,260.67	0.00	0.00	0.00
11,200.00	87.00	359.92	9,105.60	2,360.54	-915.66	2,360.54	0.00	0.00	0.00
11,300.00	87.00	359.92	9,110.84	2,460.40	-915.80	2,460.40	0.00	0.00	0.00
11,400.00	87.00	359.92	9,116.07	2,560.26	-915.94	2,560.26	0.00	0.00	0.00
11,500.00	87.00	359.92	9,121.30	2,660.13	-916.08	2,660.13	0.00	0.00	0.00
11,600.00	87.00	359.92	9,126.54	2,759.99	-916.22	2,759.99	0.00	0.00	0.00
11,700.00	87.00	359.92	9,131.77	2,859.85	-916.36	2,859.85	0.00	0.00	0.00
11,800.00	87.00	359.92	9,137.00	2,959.71	-916.50	2,959.71	0.00	0.00	0.00
11,900.00	87.00	359.92	9,142.24	3,059.58	-916.64	3,059.58	0.00	0.00	0.00
12,000.00	87.00	359.92	9,147.47	3,159.44	-916.78	3,159.44	0.00	0.00	0.00
12,100.00	87.00	359.92	9,152.70	3,259.30	-916.92	3,259.30	0.00	0.00	0.00
12,200.00	87.00	359.92	9,157.94	3,359.17	-917.06	3,359.17	0.00	0.00	0.00
12,300.00	87.00	359.92	9,163.17	3,459.03	-917.20	3,459.03	0.00	0.00	0.00
12,400.00	87.00	359.92	9,168.40	3,558.89	-917.34	3,558.89	0.00	0.00	0.00
12,500.00	87.00	359.92	9,173.64	3,658.75	-917.48	3,658.75	0.00	0.00	0.00
12,600.00	87.00	359.92	9,178.87	3,758.62	-917.61	3,758.62	0.00	0.00	0.00
12,700.00	87.00	359.92	9,184.11	3,858.48	-917.75	3,858.48	0.00	0.00	0.00





## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,800.00	87.00	359.92	9,189.34	3,958.34	-917.89	3,958.34	0.00	0.00	0.00
12,900.00	87.00	359.92	9,194.57	4,058.21	-918.03	4,058.21	0.00	0.00	0.00
13,000.00	87.00	359.92	9,199.81	4,158.07	-918.17	4,158.07	0.00	0.00	0.00
13,100.00	87.00	359.92	9,205.04	4,257.93	-918.31	4,257.93	0.00	0.00	0.00
13,200.00	87.00	359.92	9,210.27	4,357.79	-918.45	4,357.79	0.00	0.00	0.00
13,300.00	87.00	359.92	9,215.51	4,457.66	-918.59	4,457.66	0.00	0.00	0.00
13,400.00	87.00	359.92	9,220.74	4,557.52	-918.73	4,557.52	0.00	0.00	0.00
13,500.00	87.00	359.92	9,225.97	4,657.38	-918.87	4,657.38	0.00	0.00	0.00
13,600.00	87.00	359.92	9,231.21	4,757.25	-919.01	4,757.25	0.00	0.00	0.00
13,700.00	87.00	359.92	9,236.44	4,857.11	-919.15	4,857.11	0.00	0.00	0.00
13,800.00	87.00	359.92	9,241.67	4,956.97	-919.29	4,956.97	0.00	0.00	0.00
13,900.00	87.00	359.92	9,246.91	5,056.83	-919.43	5,056.83	0.00	0.00	0.00
14,000.00	87.00	359.92	9,252.14	5,156.70	-919.57	5,156.70	0.00	0.00	0.00
14,100.00	87.00	359.92	9,257.38	5,256.56	-919.71	5,256.56	0.00	0.00	0.00
14,200.00	87.00	359.92	9,262.61	5,356.42	-919.85	5,356.42	0.00	0.00	0.00
14,300.00	87.00	359.92	9,267.84	5,456.29	-919.98	5,456.29	0.00	0.00	0.00
14,400.00	87.00	359.92	9,273.08	5,556.15	-920.12	5,556.15	0.00	0.00	0.00
14,500.00	87.00	359.92	9,278.31	5,656.01	-920.26	5,656.01	0.00	0.00	0.00
14,600.00	87.00	359.92	9,283.54	5,755.87	-920.40	5,755.87	0.00	0.00	0.00
14,700.00	87.00	359.92	9,288.78	5,855.74	-920.54	5,855.74	0.00	0.00	0.00
14,800.00	87.00	359.92	9,294.01	5,955.60	-920.68	5,955.60	0.00	0.00	0.00
14,900.00	87.00	359.92	9,299.24	6,055.46	-920.82	6,055.46	0.00	0.00	0.00
15,000.00	87.00	359.92	9,304.48	6,155.33	-920.96	6,155.33	0.00	0.00	0.00
15,100.00	87.00	359.92	9,309.71	6,255.19	-921.10	6,255.19	0.00	0.00	0.00
15,200.00	87.00	359.92	9,314.95	6,355.05	-921.24	6,355.05	0.00	0.00	0.00
15,300.00	87.00	359.92	9,320.18	6,454.91	-921.38	6,454.91	0.00	0.00	0.00
15,400.00	87.00	359.92	9,325.41	6,554.78	-921.52	6,554.78	0.00	0.00	0.00
15,500.00	87.00	359.92	9,330.65	6,654.64	-921.66	6,654.64	0.00	0.00	0.00
15,600.00	87.00	359.92	9,335.88	6,754.50	-921.80	6,754.50	0.00	0.00	0.00
15,700.00	87.00	359.92	9,341.11	6,854.37	-921.94	6,854.37	0.00	0.00	0.00
15,800.00	87.00	359.92	9,346.35	6,954.23	-922.08	6,954.23	0.00	0.00	0.00
15,900.00	87.00	359.92	9,351.58	7,054.09	-922.22	7,054.09	0.00	0.00	0.00
16,000.00	87.00	359.92	9,356.81	7,153.95	-922.36	7,153.95	0.00	0.00	0.00
16,100.00	87.00	359.92	9,362.05	7,253.82	-922.49	7,253.82	0.00	0.00	0.00
16,200.00	87.00	359.92	9,367.28	7,353.68	-922.63	7,353.68	0.00	0.00	0.00
16,300.00	87.00	359.92	9,372.51	7,453.54	-922.77	7,453.54	0.00	0.00	0.00
16,400.00	87.00	359.92	9,377.75	7,553.41	-922.91	7,553.41	0.00	0.00	0.00
16,500.00	87.00	359.92	9,382.98	7,653.27	-923.05	7,653.27	0.00	0.00	0.00
16,600.00	87.00	359.92	9,388.22	7,753.13	-923.19	7,753.13	0.00	0.00	0.00
16,700.00	87.00	359.92	9,393.45	7,852.99	-923.33	7,852.99	0.00	0.00	0.00
16,800.00	87.00	359.92	9,398.68	7,952.86	-923.47	7,952.86	0.00	0.00	0.00
16,900.00	87.00	359.92	9,403.92	8,052.72	-923.61	8,052.72	0.00	0.00	0.00
17,000.00	87.00	359.92	9,409.15	8,152.58	-923.75	8,152.58	0.00	0.00	0.00
17,100.00	87.00	359.92	9,414.38	8,252.45	-923.89	8,252.45	0.00	0.00	0.00
17,200.00	87.00	359.92	9,419.62	8,352.31	-924.03	8,352.31	0.00	0.00	0.00
17,300.00	87.00	359.92	9,424.85	8,452.17	-924.17	8,452.17	0.00	0.00	0.00
17,400.00	87.00	359.92	9,430.08	8,552.03	-924.31	8,552.03	0.00	0.00	0.00
17,500.00	87.00	359.92	9,435.32	8,651.90	-924.45	8,651.90	0.00	0.00	0.00
17,600.00	87.00	359.92	9,440.55	8,751.76	-924.59	8,751.76	0.00	0.00	0.00
17,700.00	87.00	359.92	9,445.79	8,851.62	-924.73	8,851.62	0.00	0.00	0.00
17,800.00	87.00	359.92	9,451.02	8,951.49	-924.87	8,951.49	0.00	0.00	0.00
17,900.00	87.00	359.92	9,456.25	9,051.35	-925.00	9,051.35	0.00	0.00	0.00



## Planning Report



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<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,000.00	87.00	359.92	9,461.49	9,151.21	-925.14	9,151.21	0.00	0.00	0.00
18,100.00	87.00	359.92	9,466.72	9,251.07	-925.28	9,251.07	0.00	0.00	0.00
18,200.00	87.00	359.92	9,471.95	9,350.94	-925.42	9,350.94	0.00	0.00	0.00
18,300.00	87.00	359.92	9,477.19	9,450.80	-925.56	9,450.80	0.00	0.00	0.00
18,400.00	87.00	359.92	9,482.42	9,550.66	-925.70	9,550.66	0.00	0.00	0.00
18,500.00	87.00	359.92	9,487.65	9,650.53	-925.84	9,650.53	0.00	0.00	0.00
18,600.00	87.00	359.92	9,492.89	9,750.39	-925.98	9,750.39	0.00	0.00	0.00
18,700.00	87.00	359.92	9,498.12	9,850.25	-926.12	9,850.25	0.00	0.00	0.00
18,800.00	87.00	359.92	9,503.35	9,950.11	-926.26	9,950.11	0.00	0.00	0.00
18,815.18	87.00	359.92	9,504.15	9,965.28	-926.28	9,965.28	0.00	0.00	0.00
<b>SEC. 3, T3S-R2W, 330' SETBACK (NORTH LINE)</b>									
18,900.00	87.00	359.92	9,508.59	10,049.98	-926.40	10,049.98	0.00	0.00	0.00
19,000.00	87.00	359.92	9,513.82	10,149.84	-926.54	10,149.84	0.00	0.00	0.00
19,100.00	87.00	359.92	9,519.06	10,249.70	-926.68	10,249.70	0.00	0.00	0.00
19,200.00	87.00	359.92	9,524.29	10,349.57	-926.82	10,349.57	0.00	0.00	0.00
19,300.00	87.00	359.92	9,529.52	10,449.43	-926.96	10,449.43	0.00	0.00	0.00
19,358.92	87.00	359.92	9,532.61	10,508.27	-927.04	10,508.27	0.00	0.00	0.00
<b>Cut Pt. (330' Setback FNL Sec 3)= 19359 MD- 9533 TVD</b>									
19,359.02	87.00	359.92	9,532.61	10,508.37	-927.04	10,508.37	0.00	0.00	0.00
<b>CUT PT (330' HARDLINE) (16-10-3-3-2WH RANCH)</b>									
19,400.00	87.00	359.92	9,534.76	10,549.29	-927.10	10,549.29	0.00	0.00	0.00
19,464.07	87.00	359.92	9,538.11	10,613.27	-927.19	10,613.27	0.00	0.00	0.00
<b>TD (105' pass 330' Setback)= 19464 MD- 9538 TVD - TD (105' f/ 330' Setback) (16-10-3-3-2WH RANCH)</b>									



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

## Design Targets

## Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LATERAL TARGET B - plan misses target center by 1096.84usft at 0.03usft MD (0.03 TVD, 0.00 N, 0.00 E) - Rectangle (sides W100.00 H9,900.00 D0.00)	0.00	0.00	0.00	608.75	-912.41	7,255,779.39	2,034,402.37	40° 13' 49.656 N	110° 5' 19.695 W
SEC. 3, T3S-R2W, 33 - plan misses target center by 10296.68usft at 18815.18usft MD (9504.15 TVD, 9965.28 N, -926.28 E) - Polygon	0.00	0.00	-1.00	10,457.94	-4,854.52	7,265,565.00	2,030,305.00	40° 15' 26.988 N	110° 6' 10.549 W
Point 1			-1.00	0.00	0.00	7,265,565.00	2,030,305.00		
Point 2			-1.00	8.45	667.22	7,265,584.00	2,030,972.00		
Point 3			-1.00	25.45	1,995.65	7,265,622.00	2,032,300.00		
Point 4			-1.00	52.47	3,976.33	7,265,680.34	2,034,280.00		
Point 5			-1.00	52.47	3,976.33	7,265,680.34	2,034,280.00		
Point 6			-1.00	25.45	1,995.65	7,265,622.00	2,032,300.00		
Point 7			-1.00	8.45	667.22	7,265,584.00	2,030,972.00		
Point 8			-1.00	0.00	0.00	7,265,565.00	2,030,305.00		
SEC. 10, T3S-R2W, 3 - plan misses target center by 4881.35usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) - Polygon	0.00	0.00	-1.00	599.34	-4,844.42	7,255,707.80	2,030,471.00	40° 13' 49.558 N	110° 6' 10.394 W
Point 1			-1.00	0.00	0.00	7,255,707.80	2,030,471.00		
Point 2			-1.00	4.88	2,012.33	7,255,744.50	2,032,483.00		
Point 3			-1.00	9.64	3,981.65	7,255,780.40	2,034,452.00		
Point 4			-1.00	9.64	3,981.65	7,255,780.40	2,034,452.00		
Point 5			-1.00	4.88	2,012.33	7,255,744.50	2,032,483.00		
Point 6			-1.00	0.00	0.00	7,255,707.80	2,030,471.00		
SEC. 14, T3S-R2W, - plan misses target center by 5104.14usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) - Polygon	0.00	0.00	-1.00	284.86	5,096.19	7,255,550.55	2,040,415.34	40° 13' 46.450 N	110° 4' 2.220 W
Point 1			-1.00	0.00	0.00	7,255,550.55	2,040,415.34		
Point 2			-1.00	-5,310.27	10.40	7,250,241.11	2,040,509.71		
Point 3			-1.00	-5,307.64	-2,608.45	7,250,202.33	2,037,891.15		
Point 4			-1.00	-5,304.72	-5,226.51	7,250,163.84	2,035,273.37		
Point 5			-1.00	-2,632.39	-5,292.43	7,252,834.80	2,035,165.20		
Point 6			-1.00	-4.56	-5,297.84	7,255,462.21	2,035,118.23		
Point 7			-1.00	-1.26	-1,340.94	7,255,528.09	2,039,074.58		
Point 8			-1.00	0.00	0.00	7,255,550.55	2,040,415.34		
SEC. 10, T3S-R2W, - plan misses target center by 5546.20usft at 119.31usft MD (119.31 TVD, 0.66 N, 0.15 E) - Polygon	0.00	0.00	58.00	5,542.02	-223.31	7,260,722.93	2,035,013.37	40° 14' 38.410 N	110° 5' 10.810 W
Point 1			58.00	0.00	0.00	7,260,722.93	2,035,013.37		
Point 2			58.00	-2,629.86	13.15	7,258,093.61	2,035,068.11		
Point 3			58.00	-5,261.72	21.67	7,255,462.21	2,035,118.24		
Point 4			58.00	-5,267.64	-2,603.59	7,255,414.78	2,032,493.40		
Point 5			58.00	-5,274.27	-5,280.05	7,255,365.82	2,029,817.38		
Point 6			58.00	-18.63	-5,275.01	7,260,620.89	2,029,739.31		
Point 7			58.00	-3.88	-2,635.57	7,260,677.37	2,032,378.19		
Point 8			58.00	0.00	0.00	7,260,722.93	2,035,013.37		
SEC. 3 & 10, T3S-R2 - plan misses target center by 1275.30usft at 83.72usft MD (83.72 TVD, 0.33 N, 0.07 E) - Polygon	0.00	0.00	77.00	939.03	-863.17	7,256,110.40	2,034,446.38	40° 13' 52.920 N	110° 5' 19.060 W
Point 1			77.00	0.00	0.00	7,256,110.40	2,034,446.38		
Point 2			77.00	1,970.11	-6.14	7,258,080.17	2,034,409.09		
Point 3			77.00	3,942.25	-16.92	7,260,051.89	2,034,367.12		
Point 4			77.00	5,261.73	-19.21	7,261,371.17	2,034,343.97		
Point 5			77.00	7,235.89	-16.81	7,263,345.12	2,034,315.15		





## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

Point 6	77.00	8,548.30	-15.21	7,264,657.39	2,034,295.99			
Point 7	77.00	9,236.37	-14.41	7,265,345.39	2,034,285.91			
Point 8	77.00	9,236.37	-14.41	7,265,345.39	2,034,285.91			
Point 9	77.00	8,548.30	-15.21	7,264,657.39	2,034,295.99			
Point 10	77.00	7,235.89	-16.81	7,263,345.12	2,034,315.15			
Point 11	77.00	5,261.73	-19.21	7,261,371.17	2,034,343.97			
Point 12	77.00	3,942.25	-16.92	7,260,051.89	2,034,367.12			
Point 13	77.00	1,970.11	-6.14	7,258,080.17	2,034,409.09			
Point 14	77.00	0.00	0.00	7,256,110.40	2,034,446.38			
SEC. 3 & 10, T3S-R2 <sup>1</sup>	0.00	0.00	77.00	929.37	-4,843.23	7,256,037.80	2,030,466.97	40° 13' 52.820 N 110° 6' 10.380 W
- plan misses target center by 4931.60usft at 76.45usft MD (76.45 TVD, 0.27 N, 0.06 E)								
- Polygon								
Point 1	77.00	0.00	0.00	7,256,037.80	2,030,466.97			
Point 2	77.00	3,937.19	3.86	7,259,974.56	2,030,408.57			
Point 3	77.00	5,256.66	3.35	7,261,293.86	2,030,387.19			
Point 4	77.00	7,234.88	0.63	7,263,271.79	2,030,353.19			
Point 5	77.00	9,198.93	-11.40	7,265,235.40	2,030,310.11			
Point 6	77.00	9,198.93	-11.40	7,265,235.40	2,030,310.11			
Point 7	77.00	7,234.88	0.63	7,263,271.79	2,030,353.19			
Point 8	77.00	5,256.66	3.35	7,261,293.86	2,030,387.19			
Point 9	77.00	3,937.19	3.86	7,259,974.56	2,030,408.57			
Point 10	77.00	0.00	0.00	7,256,037.80	2,030,466.97			
SEC. 3, T3S-R2W,	0.00	0.00	77.00	5,542.02	-223.31	7,260,722.93	2,035,013.37	40° 14' 38.410 N 110° 5' 10.810 W
- plan misses target center by 5545.93usft at 168.49usft MD (168.48 TVD, 1.35 N, 0.16 E)								
- Polygon								
Point 1			0.00	7,260,722.93	2,035,013.37			
Point 2		-4.15	-2,635.57	7,260,677.37	2,032,378.19			
Point 3		-19.16	-5,275.01	7,260,620.89	2,029,739.31			
Point 4		2,618.79	-5,279.36	7,263,258.45	2,029,693.52			
Point 5		5,236.52	-5,296.10	7,265,875.59	2,029,635.65			
Point 6		5,253.59	-3,968.13	7,265,913.53	2,030,963.19			
Point 7		5,270.75	-2,639.37	7,265,951.56	2,032,291.51			
Point 8		5,301.20	5.71	7,266,023.57	2,034,935.79			
Point 9		3,944.28	4.28	7,264,666.79	2,034,955.68			
Point 10		2,631.88	2.85	7,263,354.53	2,034,974.87			
Point 11		0.00	0.00	7,260,722.93	2,035,013.37			
Point 12								
Soft Land Pt (84.0°) (1	0.00	0.00	8,994.00	426.75	-912.41	7,255,597.41	2,034,405.24	40° 13' 47.857 N 110° 5' 19.695 W
- plan misses target center by 0.56usft at 9262.77usft MD (8994.07 TVD, 426.74 N, -912.96 E)								
- Point								
Top Prod.(16-10-3-3-2	0.00	0.00	9,013.80	608.75	-912.41	7,255,779.39	2,034,402.37	40° 13' 49.656 N 110° 5' 19.695 W
- plan misses target center by 1.28usft at 9445.81usft MD (9012.81 TVD, 608.82 N, -913.22 E)								
- Rectangle (sides W0.00 H0.00 D800.00)								
CUT PT (330' HARDL	0.00	0.00	9,534.54	10,508.27	-926.80	7,265,677.44	2,034,231.43	40° 15' 27.490 N 110° 5' 19.885 W
- plan misses target center by 1.95usft at 19359.02usft MD (9532.61 TVD, 10508.37 N, -927.04 E)								
- Rectangle (sides W0.00 H0.00 D800.00)								
TD (105' f/ 330' Setba	0.00	0.00	9,540.00	10,613.27	-926.80	7,265,782.43	2,034,229.77	40° 15' 28.527 N 110° 5' 19.885 W
- plan misses target center by 1.93usft at 19464.07usft MD (9538.11 TVD, 10613.27 N, -927.19 E)								
- Rectangle (sides W0.00 H0.00 D800.00)								

## Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
8,580.16	8,520.00	Casing Pt.	0	0



## Planning Report



<b>Database:</b>	EDM 5000.1 Lynn Db	<b>Local Co-ordinate Reference:</b>	Well 16-10-3-3-2WH
<b>Company:</b>	NEWFIELD EXPLORATION ROCKY MOUNTAINS	<b>TVD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 83)	<b>MD Reference:</b>	WELL( 5416'+ 27'= 5,443' MSL) @ 5443.00usft (Pioneer 78 (KB=27'))
<b>Site:</b>	CENTRAL BASIN (NAD 83)	<b>North Reference:</b>	True
<b>Well:</b>	16-10-3-3-2WH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	16-10-3-3-2WH RANCH		
<b>Design:</b>	16-10-3-3-2WH RANCH Rev02		

## Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,791.49	3,771.18	Green River Formation		3.00	0.00
5,811.35	5,771.36	Trona		3.00	0.00
5,856.82	5,816.39	Mahogany Bench		3.00	0.00
6,760.16	6,710.92	Garden Gulch Member		3.00	0.00
7,038.03	6,986.09	Garden Gulch Member-1		3.00	0.00
7,223.95	7,170.20	Garden Gulch Member-2		3.00	0.00
7,987.58	7,927.60	Douglas Creek Member		3.00	0.00
8,395.79	8,335.64	B Limestone		3.00	0.00
8,530.79	8,470.64	Lower Black Shale		3.00	0.00
8,678.24	8,617.87	Castle Peak Limestone		3.00	0.00
8,818.25	8,751.03	CP LIMES		3.00	0.00
8,845.07	8,774.69	CP LIMES_2		3.00	0.00
9,025.69	8,908.93	Uteland Butte Top		3.00	0.00
9,046.21	8,920.81	Ute.Butte-A		3.00	0.00
9,074.88	8,936.08	Ute.Butte-B		3.00	0.00
9,151.04	8,968.68	Ute.Butte-C		3.00	0.00
9,199.68	8,983.11	Ute.Butte_C-PZ1		3.00	0.00
9,268.39	8,994.66	Landing Tgt (84.0°)		3.00	0.00

## Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,610.00	1,608.18	-21.62	-58.47	Start 90 ft. Tangent at 1610 MD
1,700.00	1,697.99	-26.08	-62.43	Nudge KOP- DLS= 1.50/100 MD- TFO 80.84
2,131.35	2,127.21	-34.36	-101.90	EOB- Start 5572 ft. Tangent at 2131 MD
7,703.52	7,645.09	28.20	-875.31	Nuge Drop Rate= -1.50/100 MD (7704 MD)
8,237.16	8,177.00	31.20	-912.41	Nudge Vert Pt.= 8237 MD- 8177 TVD
8,530.61	8,470.45	31.20	-912.41	Start 50 ft. Tangent at 8531 MD- 8470 TVD
8,580.61	8,520.45	31.20	-912.41	Start 35 ft. Tangent at 8581 MD- 8520 TVD
8,615.61	8,555.45	31.20	-912.41	Curve KOP- Build Rate= 12.99°/100' MD
9,262.10	8,994.00	426.07	-912.96	Soft Landing Pt.(84.0°)= 9262 MD- 8994 TVD
9,407.10	9,009.16	570.28	-913.16	Curve Build Rate= 3.00°/100 MD
9,445.77	9,012.81	608.77	-913.22	330' Setback (FSL Sec. 10) Curve Build= 3.00/100 MD
9,507.10	9,017.00	669.96	-913.30	Horz Landing Pt.(87.0°)= 9507 MD- 9017 TVD
19,358.92	9,532.61	10,508.27	-927.04	Cut Pt. (330' Setback FNL Sec 3)= 19359 MD- 9533 TVD
19,464.07	9,538.11	10,613.27	-927.19	TD (105' pass 330' Setback)= 19464 MD- 9538 TVD

Form 3160-4  
(March 2012)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: October 31, 2014

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other  
 b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,  
 Other: \_\_\_\_\_

2. Name of Operator  
 NEWFIELD PRODUCTION COMPANY

3. Address ROUTE #3 BOX 3630  
 MYTON, UT 84052

3a. Phone No. (include area code)  
 Ph: 435-646-3721

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface 280' FNL 201' FWL (NW/NW) SEC 14, T3S R2W

At top prod. interval reported below 372' FSL 734' FEL (SE/SE) SEC 10 T3S R2W

231' FNL 736' FEL (NE/NE, LOT 1) SEC 3 T3S T2W

At total depth

14. Date Spudded  
 01/12/2014

15. Date T.D. Reached  
 04/10/2014

16. Date Completed 06/30/2014  
☐ D & A ☒ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)\*  
 5419' GL 5446' KB

18. Total Depth: MD 19497'  
 TVD 9525'

19. Plug Back T.D.: MD 19460'  
 TVD

20. Depth Bridge Plug Set: MD  
 TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
 DUAL IND GRD, SP, COMP. NEUTRON, GR, CALIPER, CMT BOND

22. Was well cored? ☒ No ☐ Yes (Submit analysis)  
 Was DST run? ☒ No ☐ Yes (Submit report)  
 Directional Survey? ☐ No ☒ Yes (Submit copy)

## 23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
19-1/2"	13-3/8" J-55	54.50	0'	1667'		1295 CLASS G			
12-5/8"	9-5/8" N-80	40.00	0'	8563'		550 Bondcem		6450'	
						1250Versacem			
8-7/8"	5-1/2" P-110	20	0'	19508'		1533 CLASS G			

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8"	EOT@6755'	XN@6714'						

## 25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) UTELAND BUTTE MEMBER	9510'	19363'	9510' - 19363' MD	0.38	984	
B)						
C)						
D)						

## 27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
9510' - 19363' MD	Frac w/ 4,049,714#s of propan sand in 88,080 bbls of Lightning 17 fluid, in 42 stages.

## 28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
6/30/14	7/10/14	24	→	909	0	566			GAS LIFT
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→					PRODUCING	

## 28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

\*(See instructions and spaces for additional data on page 2)



## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

## GEOLOGICAL MARKERS

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GARDEN GULCH MARK GARDEN GULCH 1	6655' 6914'
				GARDEN GULCH 2 DOUGLAS CREEK	7077' 7791'
				CASTLE PEAK LIMESTONE UTELAND BUTTE	8580' 8891'
				UTELAND BUTTE A UTELAND BUTTE B	8907' 8919'
				UTELAND BUTTE C	8950'

## 32. Additional remarks (include plugging procedure):

Bottom Production Interval: 341' FNL 734' FEL (NE/NE, LOT 1) SEC 3 T3S T2W

## 33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☒ Other: Drilling daily activity

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) Heather Calder

Title Regulatory Technician

Signature

Heather Calder

Date 07/21/2014

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



# Weatherford®

## SURVEY REPORT

Report Date: **4/4/2014**Customer: **Newfield**Job Name: **4031965**Well Name: **Ranch 16-10-3-3-2WH**Field: **Central Basin**Rig: **Pioneer #78**Rig Loc: **Duchesne County,**Survey Calculation Method: **Minimum Curvature**

Magnetic Reference	Target Direction	Total Magnetic Field	Magnetic Dip Angle	Magnetic Declination	Grid Convergence	Total Correction
<b>True North</b>	<b>355.01 deg</b>	<b>52009 nT</b>	<b>65.86 deg</b>	<b>11.10 deg</b>	<b>0.00 deg</b>	<b>11.10 deg</b>
Survey Tie-On	Depth	INC	AZ	TVD	NS	EW
	<b>1610.00 ft</b>	<b>3.80 deg</b>	<b>221.60 deg</b>	<b>1608.18 ft</b>	<b>-21.62 ft</b>	<b>-58.47 ft</b>

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		VSect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
1697.00	4.50	220.22	1694.95	-26.38	-62.59	-20.84	0.81
1791.00	4.51	238.94	1788.67	-31.10	-68.14	-25.06	1.56
1886.00	5.38	255.18	1883.32	-34.17	-75.64	-27.46	1.73
1981.00	5.95	268.22	1977.86	-35.46	-84.87	-27.95	1.48
2076.00	7.40	273.46	2072.21	-35.25	-95.90	-26.77	1.65
2171.00	9.40	275.76	2166.19	-34.10	-109.72	-24.43	2.13
2266.00	9.54	275.70	2259.89	-32.54	-125.28	-21.52	0.15
2361.00	8.96	274.67	2353.66	-31.15	-140.48	-18.82	0.63
2456.00	8.39	274.21	2447.57	-30.04	-154.77	-16.47	0.60
2551.00	10.61	276.96	2541.26	-28.47	-170.36	-13.55	2.38
2645.00	11.16	277.80	2633.57	-26.19	-187.97	-9.74	0.61
2740.00	10.64	277.98	2726.85	-23.73	-205.76	-5.74	0.55
2835.00	10.04	277.34	2820.31	-21.45	-222.66	-2.00	0.64
2930.00	9.94	275.11	2913.87	-19.66	-239.04	1.20	0.42
3024.00	9.72	275.27	3006.49	-18.21	-255.02	4.04	0.24
3118.00	9.52	272.84	3099.17	-17.10	-270.69	6.51	0.48
3212.00	9.41	273.09	3191.89	-16.30	-286.12	8.65	0.12
3307.00	9.16	272.87	3285.65	-15.50	-301.43	10.78	0.27
3401.00	8.69	271.06	3378.51	-14.99	-316.00	12.55	0.58
3495.00	8.25	267.79	3471.48	-15.12	-329.84	13.62	0.69
3589.00	9.19	274.94	3564.40	-14.74	-344.06	15.25	1.52
3683.00	9.19	275.24	3657.19	-13.40	-359.02	17.87	0.05
3777.00	8.97	273.52	3750.01	-12.27	-373.80	20.29	0.37
3872.00	8.77	271.63	3843.88	-11.61	-388.44	22.22	0.37
3966.00	8.35	268.02	3936.83	-11.64	-402.42	23.41	0.73
4061.00	9.24	272.63	4030.71	-11.53	-416.93	24.78	1.19
4156.00	9.60	277.41	4124.43	-10.16	-432.41	27.49	0.91
4251.00	9.58	278.81	4218.11	-7.92	-448.08	31.08	0.25
4346.00	9.36	276.90	4311.81	-5.79	-463.56	34.56	0.40
4441.00	8.99	274.82	4405.60	-4.23	-478.62	37.41	0.52
4536.00	9.34	273.60	4499.38	-3.13	-493.71	39.83	0.42
4631.00	9.58	271.81	4593.09	-2.39	-509.31	41.92	0.40
4726.00	9.59	269.43	4686.77	-2.22	-525.12	43.46	0.42
4821.00	9.83	268.02	4780.41	-2.58	-541.14	44.50	0.36
4915.00	9.51	278.13	4873.08	-1.76	-556.85	46.68	1.84

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		VSect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
5010.00	8.19	274.67	4966.94	-0.10	-571.36	49.60	1.50
5104.00	7.20	269.54	5060.10	0.40	-583.93	51.19	1.28
5199.00	7.94	277.23	5154.27	1.18	-596.39	53.05	1.32
5294.00	8.12	277.32	5248.34	2.86	-609.55	55.87	0.19
5389.00	7.94	274.66	5342.41	4.25	-622.75	58.40	0.43
5484.00	7.43	272.60	5436.55	5.06	-635.42	60.31	0.61
5579.00	6.51	266.61	5530.85	5.02	-646.94	61.27	1.23
5674.00	7.69	273.76	5625.12	5.12	-658.65	62.39	1.55
5768.00	7.45	273.82	5718.31	5.93	-671.01	64.28	0.26
5863.00	7.68	274.80	5812.48	6.88	-683.48	66.30	0.28
5958.00	9.26	276.21	5906.44	8.23	-697.41	68.86	1.68
6053.00	8.44	269.75	6000.31	9.03	-711.98	70.93	1.36
6148.00	9.23	272.56	6094.18	9.34	-726.56	72.50	0.95
6243.00	9.52	277.29	6187.91	10.68	-741.96	75.17	0.87
6338.00	8.91	274.53	6281.69	12.26	-757.09	78.06	0.79
6433.00	8.33	267.57	6375.62	12.54	-771.30	79.59	1.26
6528.00	8.58	266.25	6469.59	11.79	-785.25	80.05	0.33
6623.00	9.07	273.24	6563.46	11.75	-799.80	81.27	1.24
6717.00	8.38	282.21	6656.38	13.62	-813.89	84.36	1.62
6812.00	8.79	281.60	6750.31	16.54	-827.77	88.48	0.44
6907.00	8.32	278.59	6844.26	19.03	-841.67	92.16	0.68
7002.00	7.96	274.58	6938.30	20.58	-855.03	94.87	0.71
7096.00	7.54	269.38	7031.44	21.03	-867.68	96.42	0.87
7191.00	7.41	265.52	7125.64	20.49	-880.02	96.95	0.55
7286.00	7.57	268.89	7219.83	19.89	-892.38	97.43	0.49
7380.00	6.76	281.83	7313.10	20.90	-903.99	99.45	1.92
7475.00	6.35	280.04	7407.48	22.96	-914.64	102.43	0.48
7570.00	5.88	273.15	7501.94	24.15	-924.67	104.48	0.92
7665.00	5.84	268.46	7596.44	24.28	-934.36	105.46	0.51
7760.00	6.19	268.86	7690.92	24.05	-944.31	106.10	0.37
7855.00	6.75	269.60	7785.31	23.91	-955.01	106.89	0.60
7950.00	6.75	268.10	7879.65	23.69	-966.18	107.64	0.19
8044.00	6.88	264.60	7972.99	22.97	-977.30	107.89	0.46
8139.00	5.75	266.10	8067.41	22.11	-987.72	107.94	1.20
8234.00	3.88	278.10	8162.08	22.24	-995.65	108.76	2.23
8329.00	3.63	282.10	8256.87	23.33	-1001.77	110.37	0.38
8423.00	3.63	287.60	8350.68	24.85	-1007.52	112.39	0.37
8510.00	3.88	290.10	8437.50	26.69	-1012.91	114.70	0.34
8604.00	4.78	314.42	8531.24	30.53	-1018.69	119.02	2.15
8636.00	7.49	343.79	8563.06	33.47	-1020.23	122.08	12.70
8667.00	10.98	349.87	8593.65	38.31	-1021.31	127.00	11.67
8699.00	14.55	356.81	8624.86	45.33	-1022.07	134.06	12.12
8731.00	18.49	4.06	8655.53	54.41	-1021.93	143.09	13.87
8762.00	21.86	7.92	8684.63	65.03	-1020.79	153.58	11.68
8794.00	24.04	9.83	8714.09	77.36	-1018.86	165.69	7.20
8826.00	26.98	11.74	8742.97	90.89	-1016.27	178.94	9.54
8857.00	30.70	14.16	8770.12	105.45	-1012.90	193.16	12.57
8889.00	33.97	15.92	8797.16	121.98	-1008.45	209.23	10.63
8920.00	36.41	16.19	8822.49	139.14	-1003.50	225.90	7.89
8949.00	38.77	16.06	8845.47	156.14	-998.59	242.40	8.14



Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		VSect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
8983.00	42.11	17.85	8871.34	177.22	-992.15	262.85	10.40
9015.00	46.51	19.29	8894.24	198.40	-985.02	283.33	14.10
9045.00	51.79	18.93	8913.85	219.84	-977.60	304.04	17.62
9078.00	57.62	18.09	8932.91	245.37	-969.06	328.73	17.79
9110.00	62.99	16.97	8948.76	271.87	-960.70	354.40	17.05
9140.00	67.91	15.27	8961.22	298.08	-953.13	379.85	17.19
9173.00	73.34	13.12	8972.16	328.25	-945.51	409.24	17.56
9205.00	78.38	10.44	8979.98	358.61	-939.18	438.94	17.72
9247.00	85.37	7.44	8985.91	399.66	-932.74	479.27	18.08
9279.00	88.46	3.77	8987.64	431.45	-929.62	510.67	14.98
9310.00	89.69	0.24	8988.14	462.42	-928.53	541.43	12.06
9342.00	90.00	358.40	8988.22	494.42	-928.91	573.34	5.83
9374.00	88.95	358.00	8988.52	526.40	-929.92	605.29	3.51
9405.00	86.17	357.86	8989.84	557.35	-931.04	636.22	8.98
9437.00	85.62	357.82	8992.13	589.24	-932.24	668.10	1.72
9468.00	85.62	357.63	8994.49	620.13	-933.47	698.97	0.61
9500.00	85.49	357.38	8996.97	652.00	-934.86	730.84	0.88
9532.00	85.62	357.10	8999.45	683.87	-936.39	762.72	0.96
9595.00	85.37	357.39	9004.40	746.60	-939.41	825.48	0.61
9690.00	84.75	356.99	9012.58	841.13	-944.05	920.06	0.78
9721.00	85.37	357.80	9015.25	871.98	-945.46	950.92	3.28
9753.00	85.49	358.42	9017.80	903.86	-946.51	982.77	1.97
9785.00	85.50	358.73	9020.32	935.76	-947.30	1014.61	0.97
9816.00	86.48	359.88	9022.48	966.68	-947.68	1045.44	4.87
9848.00	86.67	0.31	9024.39	998.62	-947.62	1077.26	1.47
9879.00	86.91	0.35	9026.13	1029.57	-947.44	1108.08	0.78
9911.00	88.33	0.43	9027.46	1061.54	-947.23	1139.91	4.44
9943.00	89.01	0.95	9028.20	1093.53	-946.84	1171.74	2.67
9974.00	88.89	0.99	9028.77	1124.52	-946.32	1202.57	0.41
10047.00	87.78	0.33	9030.89	1197.48	-945.48	1275.18	1.77
10142.00	87.16	358.80	9035.09	1292.38	-946.20	1369.79	1.74
10236.00	86.85	355.94	9040.00	1386.15	-950.50	1463.57	3.06
10332.00	87.29	354.95	9044.90	1481.72	-958.12	1559.44	1.13
10426.00	86.91	352.98	9049.66	1575.07	-967.99	1653.30	2.13
10521.00	87.96	358.28	9053.92	1669.67	-975.21	1748.16	5.68
10616.00	88.33	0.81	9056.99	1764.61	-975.97	1842.81	2.69
10711.00	88.34	1.81	9059.75	1859.54	-973.80	1937.19	1.05
10806.00	86.67	2.11	9063.89	1954.39	-970.55	2031.40	1.79
10901.00	86.24	3.65	9069.76	2049.09	-965.79	2125.33	1.68
10995.00	87.22	6.87	9075.12	2142.52	-957.18	2217.66	3.58
11088.00	87.35	11.12	9079.53	2234.26	-942.66	2307.78	4.57
11181.00	87.35	8.75	9083.83	2325.76	-926.64	2397.54	2.55
11274.00	88.27	7.71	9087.39	2417.73	-913.33	2488.01	1.49
11367.00	86.55	1.65	9091.59	2510.28	-905.75	2579.55	6.77
11459.00	85.13	358.20	9098.27	2602.02	-905.87	2670.95	4.05
11552.00	83.51	357.07	9107.47	2694.48	-909.69	2763.39	2.12
11645.00	86.73	0.65	9115.39	2787.10	-911.52	2855.82	5.17
11738.00	87.41	3.22	9120.14	2879.91	-908.39	2948.01	2.86
11830.00	87.53	3.04	9124.20	2971.69	-903.37	3039.00	0.23
11923.00	86.73	3.86	9128.86	3064.40	-897.78	3130.88	1.23

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		VSect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
12018.00	86.98	1.18	9134.07	3159.16	-893.61	3224.91	2.83
12113.00	85.68	353.12	9140.16	3253.76	-898.32	3319.57	8.58
12208.00	86.55	353.90	9146.60	3347.94	-909.03	3414.32	1.23
12303.00	86.60	351.90	9152.27	3442.03	-920.75	3509.08	2.10
12398.00	86.67	354.01	9157.85	3536.15	-932.38	3603.85	2.22
12493.00	86.85	358.15	9163.22	3630.75	-938.86	3698.66	4.36
12588.00	86.98	2.64	9168.34	3725.59	-938.21	3793.08	4.72
12682.00	88.09	1.02	9172.38	3819.45	-935.21	3886.32	2.09
12777.00	86.61	358.98	9176.77	3914.34	-935.21	3980.85	2.65
12872.00	86.67	354.56	9182.34	4009.00	-940.55	4075.62	4.65
12967.00	87.22	356.08	9187.41	4103.55	-948.29	4170.48	1.70
13062.00	86.18	355.79	9192.88	4198.15	-955.01	4265.31	1.14
13157.00	87.97	3.97	9197.73	4292.94	-955.21	4359.76	8.80
13251.00	87.10	359.43	9201.78	4386.79	-952.42	4453.01	4.91
13346.00	87.18	357.70	9206.52	4481.64	-954.80	4547.70	1.82
13441.00	87.29	5.68	9211.11	4576.41	-952.00	4641.87	8.39
13509.00	89.20	12.56	9213.19	4643.47	-941.23	4707.74	10.50
13604.00	87.29	10.08	9216.10	4736.57	-922.59	4798.87	3.29
13698.00	86.67	6.70	9221.06	4829.42	-908.90	4890.17	3.65
13793.00	87.16	3.49	9226.17	4923.90	-900.48	4983.56	3.41
13888.00	86.86	1.49	9231.13	5018.67	-896.35	5077.62	2.13
13983.00	86.54	358.86	9236.60	5113.51	-896.06	5172.07	2.78
14078.00	87.66	356.68	9241.40	5208.30	-899.76	5266.83	2.58
14173.00	87.35	356.87	9245.54	5303.06	-905.10	5361.69	0.38
14267.00	87.29	356.25	9249.93	5396.79	-910.73	5455.55	0.66
14362.00	87.35	356.48	9254.37	5491.50	-916.75	5550.42	0.25
14457.00	87.47	357.80	9258.67	5586.28	-921.48	5645.26	1.39
14552.00	87.04	0.43	9263.22	5681.15	-922.95	5739.90	2.80
14647.00	87.53	358.96	9267.72	5776.04	-923.45	5834.47	1.63
14742.00	88.03	356.11	9271.40	5870.87	-927.54	5929.30	3.04
14837.00	87.48	355.62	9275.12	5965.55	-934.38	6024.21	0.78
14931.00	87.78	357.11	9279.01	6059.28	-940.33	6118.10	1.62
15026.00	87.59	358.75	9282.85	6154.13	-943.76	6212.90	1.74
15121.00	87.04	358.80	9287.30	6249.01	-945.79	6307.59	0.58
15216.00	87.23	359.64	9292.04	6343.88	-947.08	6402.22	0.91
15311.00	87.41	359.99	9296.49	6438.78	-947.39	6496.78	0.41
15405.00	87.29	1.40	9300.83	6532.67	-946.25	6590.21	1.50
15500.00	86.42	1.05	9306.04	6627.50	-944.22	6684.51	0.99
15595.00	86.83	1.05	9311.64	6722.32	-942.49	6778.82	0.43
15690.00	87.29	1.90	9316.51	6817.16	-940.04	6873.09	1.02
15784.00	87.29	1.08	9320.95	6911.02	-937.60	6966.38	0.87
15879.00	86.48	2.23	9326.12	7005.84	-934.86	7060.60	1.48
15974.00	87.60	3.72	9331.02	7100.58	-929.94	7154.56	1.96
16069.00	85.00	2.95	9337.15	7195.22	-924.42	7248.35	2.85
16164.00	85.68	1.63	9344.87	7289.82	-920.64	7342.27	1.56
16259.00	86.67	1.08	9351.21	7384.58	-918.40	7436.48	1.19
16353.00	87.17	2.12	9356.26	7478.41	-915.78	7529.72	1.23
16448.00	86.67	0.33	9361.36	7573.25	-913.75	7624.02	1.95
16543.00	86.91	359.31	9366.68	7668.10	-914.05	7718.54	1.10
16637.00	88.64	0.25	9370.33	7762.02	-914.41	7812.14	2.09

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		VSect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
16732.00	87.96	1.38	9373.15	7856.97	-913.06	7906.61	1.39
16827.00	87.29	0.19	9377.09	7951.87	-911.76	8001.04	1.44
16922.00	87.65	357.43	9381.28	8046.75	-913.73	8095.73	2.93
17016.00	87.35	356.01	9385.38	8140.50	-919.10	8189.60	1.54
17111.00	87.04	354.78	9390.03	8235.08	-926.72	8284.48	1.33
17206.00	87.16	354.78	9394.84	8329.57	-935.35	8379.36	0.13
17301.00	86.42	354.40	9400.16	8423.99	-944.29	8474.20	0.88
17396.00	86.48	356.81	9406.04	8518.53	-951.56	8569.01	2.53
17491.00	87.41	1.02	9411.11	8613.35	-953.35	8663.63	4.53
17585.00	87.84	2.16	9415.00	8707.23	-950.75	8756.93	1.30
17680.00	87.04	1.86	9419.25	8802.08	-947.42	8851.13	0.90
17775.00	86.61	2.43	9424.51	8896.87	-943.87	8945.25	0.75
17870.00	86.73	3.42	9430.03	8991.58	-939.03	9039.18	1.05
17965.00	86.85	2.26	9435.35	9086.31	-934.33	9133.15	1.23
18060.00	86.73	0.93	9440.67	9181.13	-931.69	9227.37	1.40
18154.00	86.92	0.88	9445.87	9274.97	-930.21	9320.73	0.21
18249.00	86.36	0.20	9451.44	9369.80	-929.31	9415.12	0.93
18344.00	86.05	359.89	9457.73	9464.59	-929.24	9509.55	0.46
18438.00	86.54	359.42	9463.80	9558.39	-929.80	9603.04	0.72
18533.00	86.42	359.30	9469.63	9653.21	-930.86	9697.59	0.18
18628.00	87.10	359.69	9475.00	9748.05	-931.70	9792.15	0.82
18723.00	87.16	0.12	9479.76	9842.93	-931.85	9886.68	0.46
18818.00	88.40	1.49	9483.44	9937.85	-930.52	9981.12	1.94
18913.00	87.22	0.91	9487.07	10032.76	-928.53	10075.50	1.38
19007.00	86.55	0.35	9492.18	10126.61	-927.50	10168.91	0.93
19102.00	85.99	358.89	9498.36	10221.40	-928.13	10263.39	1.64
19197.00	85.80	358.27	9505.16	10316.13	-930.48	10357.97	0.68
19292.00	86.05	358.99	9511.91	10410.86	-932.74	10452.54	0.80
19387.00	85.99	359.08	9518.50	10505.62	-934.34	10547.07	0.11
19481.00	87.36	358.58	9523.96	10599.44	-936.25	10640.70	1.55
19497.00	87.47	358.31	9524.68	10615.42	-936.69	10656.66	1.82

Vertical Section is 10682.59 ft along the target direction of 355.01 deg at a measured depth of 19523.00 ft.  
Horizontal Displacement is 10682.59 ft along the well bore azimuth of 354.97 deg.  
The total correction is 11.10 deg relative to True North.



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Job Category	Job Start Date	Job End Date

## Daily Operations

Report Start Date 5/27/2014	Report End Date 5/28/2014	24hr Activity Summary NU Frac Stack, Manifold, Flow Back
Start Time 06:00	End Time 15:00	Comment Check csg pressure. ND night cap. NU tbg head. Test void on tbg head. Set FB tanks. Install risers on csg valves. Install grating. NU frac manifold. Change orientation of HCR valves to accomodate WL sheaves during frac. Change orientation of wing valves on tbg head to accomodate production equipment. Install flow lines..
Start Time 15:00	End Time 00:00	Comment SDFN, to let Construction finish ops
Report Start Date 5/28/2014	Report End Date 5/29/2014	24hr Activity Summary RU Frac Tree and Test. Run CBL
Start Time 00:00	End Time 07:00	Comment Wait on Construction to finish their operations
Start Time 07:00	End Time 11:00	Comment JSA and safety meeting. Production has installed flow lines and backfilled ditch. JSA and safety meeting. NU frac tree consisting of 10K Cameron tubing head for 5-1/2" casing with 7-1/16" flange looking up. 10K 7-1/16" 'Lower Master' hydraulic frac valve (HCR) , 10K 7-1/16" 'Upper Master' manual frac valve , 10K 7-1/16" flowcross with dual, double 4-1/16" outlets, 10K 7-1/16" 'Crown' manual frac valve . NU frac manifold consisting of 7-1/16" 10K manual frac valve, 7-1/16" 10K hydraulic HCR valve, and 7-1/16" 10K goat head with 4-1504 connections. Connected to frac tree with 4" 15K iron. Install TWCV in B section of WH and test Frac stack, frac manifold, and tbg head and wing valves as per Newfield Pressure testing Guidelines. 250 psi low / 10,000 psi high.
Start Time 11:00	End Time 14:00	Comment Production has installed flow lines and backfilled ditch. JSA and safety meeting. NU frac tree consisting of 10K Cameron tubing head for 5-1/2" casing with 7-1/16" flange looking up. 10K 7-1/16" 'Lower Master' hydraulic frac valve (HCR) , 10K 7-1/16" 'Upper Master' manual frac valve , 10K 7-1/16" flowcross with dual, double 4-1/16" outlets, 10K 7-1/16" 'Crown' manual frac valve . NU frac manifold consisting of 7-1/16" 10K manual frac valve, 7-1/16" 10K hydraulic HCR valve, and 7-1/16" 10K goat head with 4-1504 connections. Connected to frac tree with 4" 15K iron. Install TWCV in B section of WH and test Frac stack, frac manifold, and tbg head and wing valves as per Newfield Pressure testing Guidelines. 250 psi low / 10,000 psi high. Test Good
Start Time 14:00	End Time 17:00	Comment RU Pros Flow Back Iron
Start Time 17:00	End Time 20:00	Comment B&C Quick Testing. Pros Flow Back, Testing Flow back Iron, Newfield Pressure testing Guidelines. 250 psi low / 10,000 psi high Test Good
Start Time 20:00	End Time 23:00	Comment MIRU J-W Wire Line PU Lubricator
Start Time 23:00	End Time 00:00	Comment B&C Quick Testing. Test Lubricator 5,000 psi high 5 mins test good.
Report Start Date 5/29/2014	Report End Date 5/30/2014	24hr Activity Summary MIRU Halliburton Frac
Start Time 00:00	End Time 02:00	Comment J-W RIH w/ (GR L-3.68 OD-2.75 WT-30.00 ) (CCL L-1.81 OD-2.75 WT-10.00 ) ( Cent L-2.86 OD-2.75 WT-10.00 ) ( 275 CTEKSECWTWLSLANS L-8ft OD-2.75 WT-102.00 ) ( Cent L-2.86 OD-2.75 WT-10.00 ) ( 1-7/16 Cable Head L-1.00 OD-1.44 WT-3.00 ) Total Length 21.35
Start Time 02:00	End Time 05:00	Comment J-W RIH w/ (GR L-3.68 OD-2.75 WT-30.00 ) (CCL L-1.81 OD-2.75 WT-10.00 ) ( Cent L-2.86 OD-2.75 WT-10.00 ) ( 275 CTEKSECWTWLSLANS L-8ft OD-2.75 WT-102.00 ) ( Cent L-2.86 OD-2.75 WT-10.00 ) ( 1-7/16 Cable Head L-1.00 OD-1.44 WT-3.00 ) Total Length 21.35. Drop in heel deep as possible to 9,220'. B&C Quick Testing pressures up 1,500 psi on well POOH Logging fwell Send log to engineer and completion superintendent





Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	05:00	End Time
	06:00	Comment
		Run GR/CCL/CBL. Ran 500' log with no pressure. Pressured to 1500 psi. Ran logs from 9211 to surf. TOC at 6450'. All tools recovered. Left WL trk rigged up for frac.
Start Time	06:00	End Time
	11:00	Comment
		Complete location Prep spread and blade rock around well
Start Time	11:00	End Time
	16:00	Comment
		MIRU HES pump trucks. Rig up and test lines to 9500 psi. Open WH. Pressure csg to 7000 psi hold 30 mins no bleed off
Start Time	16:00	End Time
	19:00	Comment
		Started open toe sleeve. 17:10 Pressure up 8,650 psi hold 3 mins. Increase pressure to 8,811 psi hold 3 mins, increase pressure to 9,052 psi hold 3 mins, increase pressure to 9,511 psi hold 3 mins, Bleed well down to 1,200 psi.
		17:31 Pressure up 8,580 psi hold 3 mins. Increase pressure to 9,524 psi hold 3 mins, Bleed well down to 5,000 psi. Pressure up 9,650 psi hold 3 mins.
		18:11 Bleed well down to 5,000 psi. Pressure up 9,650 psi hold 3 mins.
		18:20 Bleed well down to 5,000 psi. Pressure up 9,560 psi hold 3 mins.
		18:32 Bleed well down to 5,000 psi. Pressure up 9,570 psi hold 3 mins.
		18:49 Bleed well down to 5,000 psi. Pressure up 9,825 psi hold 3 mins.
		19:00 Hold 9,500 psi on well, HSE moving over on Aubrey open toe sleeve
Start Time	19:00	End Time
	00:00	Comment
		21:20:18 I I -- 21 :20:18 NEXT TREATMENT Ireatment Interval 1 0' 0.0 0' 0:.
		21:23:39 OPEN WELL C'C)pen Well 9242 0.0' 0'1 -- 21 :29:30 ~tqge 1 IFump-In 9259 0.0 a a-
		22:08:12 CHANGE CHOKE 'Change Choke 2642' 0.01 515 5; 15.- 1---
		22:24:56 PRESSURETEST I'Fressure Test 1_ 0'954 0.01 531 5;-~
		22:29:11 BREAK FORMATION 11Ereak Formation 8575 9.D! 10'80' 10'I 801),
		- 22:30:11 INJECTION RATE :i:J:niECTION Rate 7638, 6.3 1333 13: 33~
		- 22:33:03 INJECTION RATE iJ::Iniection Rate 7690 8.31 2113 ' 21,~
		22:36:15 INJECTION RATE -!J:niECTION Rate 7872 1_ 0.81 3256 ' 32; 56Q..
		22:38:09 INJECTION RATE :i:J:niECTION Rate ! 7989 1- 2.61 4143 41._~
		22:41:14 SHUTDOWN :~:5h utdown 80'63. L 2.6 5757 57' 5r-
		. 22:41:21 ISIP !: :J:SIP 7147 0'2 5781 sr 81~_ 22:48:48 sHUT IN WELL :i=Shut In Well
Report Start Date	Report End Date	24hr Activity Summary
5/30/2014	5/31/2014	Fracing
Start Time	00:00	End Time
	00:00	Comment
		JSA and safety meeting. MIRU Halliburton Frac Equipment
Start Time	00:00	End Time
	06:00	Comment
		MIRU Halliburton Frac Crew
Start Time	06:00	End Time
	07:00	Comment
		Safety Stand Down. Talk about near misses in field. Talk about simops for Frac operations with day and night crews
Start Time	07:00	End Time
	13:00	Comment
		Finish rigging in frac. Remanifold frac tree.
Start Time	13:00	End Time
	14:00	Comment
		Frac stage 1. All sand placed on formation as per frac design and flushed as per design. Currently- Getting 5-10-15. Plan forward- Rig up wireline and P&P stage 2 and log out of well.
		1. Global Kick Outs set at 9500 psi. Pressure tested to 10500 psi. Job pumped with Produced Water .
		2. Saw good pressure relief when acid reached perf. Able to work up to designed rate.
		3. Had pressure increase when xlinked fluid and 100Mesh reached bottom but leveled out with 1.0ppg 100 Mesh on formation.
		4. Overall good job with no problems, able to place completely.
		WG-36-4.6% (35.9 ), MC S-2010T-4.1% (1.4 ) Vicon NF-2.8% (2.6 ) , Losurf 300D-3.6% (2.3 )



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	14:00	End Time
		18:00
Comment		
P&P stage 2.		
RIH with guns and Plug to KOP. pumped down guns at 13 bpm @ 7508 Psi, @250 fpm, 935 LT, pumped guns to 19,260. Pulled up and got line tension and set plug @ 19,250. Line tension prior to setting plug 1800, line tension after plug set 1700, plug set time 55 sec. POH and perf'd at 19192', 194'- 19,038', 040 -'. POOH with tools, max pressure for pump down: 7508 Max rate for pump down- 13_bpm. Total BBIs pumped-533.		
Log out of well from top perf.		
Start Time	18:00	End Time
		21:00
Comment		
POOH Logging 19.038 to 8,000 @ 60 fpm J-W send Logs out		
20:30- OOP all guns fired drop ball		
Currently-Get ready Frac Stage #2		
Start Time	21:00	End Time
		00:00
Comment		
Frac stage 2. All sand placed on formation as per frac design and flushed as per design. Currently- Getting 5-10-15		
1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water		
2. Job went well with all proppant placed.		
FR-66-18.3% (3.6 ), MO-67-6.3% (1.7 ), MC S-2010T-9.9% (4.4 ) Vicon NF-5% (7.1 ), Cat 3/4-12.4% (1.7 ), MCB 8642-15.5% (2.7 )		
Report Start Date	Report End Date	24hr Activity Summary
5/31/2014	6/1/2014	Frac &P&P Stage #4 #5
Start Time	00:00	End Time
		04:00
Comment		
P&P Stage #3 RIH with guns and Plug to KOP. pumped down guns at 13 bpm @ 5860 Psi, @253 fpm, 704 LT, pumped guns to 18,999. Pulled up and got line tension and set plug @ 18,992. Line tension prior to setting plug 1225, line tension after plug set 1183, plug set time 45 sec. POH and perf'd at 18,945-947, 18,865-867. POOH with tools, max pressure for pump down: 5860 Max rate for pump down- 13_bpm. Total BBIs pumped-519		
Start Time	04:00	End Time
		05:00
Comment		
1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water		
2. Job went well with all proppant placed.		
Ball Seat Stage Pressures and Rate: 6298 psi @ 15.4 bpm , 5757 psi Pressure before Seating , 6298 psi Pressure after Seating		
WG-36-12.3% (153.9 ), BC-200-7.6% (7.7 ), FR-66-9.1% (1.6 ), BA-20-19.6% (2.5 ), CL-31-19.6% (2.5 ) MO-67-11.6% (2.9 ), Scalesorb 7-53.5% (115.2 ), MC S-2010T-29.7% (12.7 ) Losurf 300D-17.1% (14.6 ) Cat 3/4-10.3% (1 ), MCB 8642-17.1% (2.9 )		
Start Time	05:00	End Time
		08:00
Comment		
Ran in well with wireline to KOP. Started the pumps. Pumped the plug in to 18,792 . Set plug. Lost communication with the gun string. Picked up and regained communication with the gun string. Pumped tools back down and tagged plug. Picked up again and lost communications. Change out the slip ring. Still no communications. Decision made to POOH with the gun string and inspect the tools.		
Currently POOH with wireline.		
Start Time	08:00	End Time
		12:00
Comment		
P&P Stage #4 RIH with guns for re-run. Pumped down guns at 14 bpm @ 7110 Psi, @260 fpm, 840 LT, pumped guns to 18,792. Pulled up and got line tension and correlated off plug. POH and perf'd at 18,765-67, 18,695-97.		
Start Time	12:00	End Time
		14:00
Comment		
POOH with Wireline		



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	14:00	End Time
		20:00
Comment Began Stage 4 Frac, while on pad and started gel w/link the growler lost communications with Gel LA pump and could not control concentration. SD and trouble shoot without finding a solution. HES has a replacement on the way from the Vernal yard. We have been down since 14:20. Decision was just made to replace equipment.		
Start Time	20:00	End Time
		22:00
Comment Frac Stage #4 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .2. Problems on Growler, lost flowmeter. Shutdown to during pad, to fix. Down for 6 hrs 40 minutes.3. Resumed job without any further problems. 4. Held 4 ppg due to rising pressure. 5. Well was successfully flushed with all proppant placed.WG-36-8.9% (151.5 ), BC-200-3.2% (5.2 ), CL-31-5.1% (1 ) MO-67-2.6% (1 ), MC S-2010T-9.1% (5.2 ) Vicon NF-2.8% (5.5 ), Losurf 300D-4.9% (5.6 )		
Start Time	22:00	End Time
		00:00
Comment P&P Stage #5 RIH with guns and Plug to KOP. pumped down guns at 12 bpm @ 7,588 Psi, @245 fpm,735 LT, pumped guns to 18,570, Pulled up and got line tension and set plug@ 18,526.. Line tension prior to setting plug 1866, line tension after plug set 1730, plug set time 52 sec. POH and perfed at 18,510-512, 18,410-412. POOH with tools, max pressure for pump down: 7,588. Max rate for pump down- 12-bpm. Total BBls pumped-482 Currently- POOH w/Wire Line		
Report Start Date	Report End Date	24hr Activity Summary
6/1/2014	6/2/2014	Frac & P&P
Start Time	00:00	End Time
		01:00
Comment POOH w/Wire Line on Stage #5		
Start Time	01:00	End Time
		02:30
Comment Frac Stage #5 All sand placed on formation as per frac design and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Job was pumped as designed. 3. Pressure turned up during flush. The last pump kicked out with ~81 bbls left in flush as 5 ppg hit formation. 4. Well is currently being flowed back. Ball Seat Stage Pressures and Rate: 6304 psi @ 15.1 bpm , 6086 psi Pressure before Seating , 6304 psi Pressure after Seating WG-36-8.2% (129.2 ), FR-66-7.4% (1.1 ),BA-20-14.1% (2.2 ), CL-31-14.1% (2.2 ) MO-67-4.9% (1.6 ), MC S-2010T-5.5% (2.6 ) Vicon NF-5.8% (9 ), Losurf 300D-4.2% (3.9 ), Cat 3/4-11.3% (1.8 ), MCB 8642-7.6% (1.4 )		
Start Time	02:30	End Time
		09:00
Comment 02:30 Screened out. While Fracing Stage #5, we had All Sand away and 328bbls into our 408bbls of designed flush the well screened out. In the process of lining up to Flow Well back. We will Flow 600 to 800bbls back and then try to get back into flush. 03:00 am Open well 9,500 psi on well, open on 18/64 8 bpm @ 3,000 psi Flow Back. 04:30 am Flow Back on 18/64 8 bpm @ 3,000 psi Flow back 700 bbls get lots of sand Currently- Flow well back 8 bpm Flowed back 800 bbls until clean fluid was returning. Currently-Sweeping the wellbore with clean fluid. After we flowed the well back we pumped 1570 bbls of clean fluid with fr to try to get well to break. Shut down to discuss plan forward and then begin pumping in well again. Ramped pump rates in 3 bbls per min steps. Got up to 11.5 bbls per min @ 8860 psi. Slowly worked rate to 12.8 bbls per min pressure was still @8855. Worked rate up to 15 bbls per min. Pressure was @ 8845. Pressure was stabilized at 8845. Pumped 250 bbls to flush the lateral. Shut the pumps down and rigged up wireline. Currently- Pressure testing wireline lubricator and preparing to P&P stage 6		



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time 09:00	End Time 13:00	Comment P&P stage 6 Ran in well to KOP and correlated wireline. Began pumping down. Increased pump step rate by 3 bbls per min coming up. Got to 10 bbls per min and 8600 psi. Pump equipment kept kicking out on the Global shut downs. Got that problem resolved and made it to 8950 which is about 40 deg in the lateral and noticed the frac buffalo head was leaking. Shut down pumps and made decision to get nipple up crew from FMC out to change the ring gaskets and re-torque the frac head. Currently- POOH with wireline guns and plug.
Start Time 13:00	End Time 14:00	Comment Broke the frac lines off the frac head. Broke the frac head off of the crown valve. Changed out the ring gasket. Re-torqued frac head and rigged up 4" pump lines. Currently-Pressure testing the frac tree and preparing to P&P stage 6
Start Time 14:00	End Time 17:30	Comment P&P Stage #6 RIH with guns and Plug to KOP. pumped down guns at 11.8 bpm @ 9420 Psi, @130 fpm, 810 LT, pumped guns to 18,350, Pulled up and got line tension and set plug@ 18,340. Line tension prior to setting plug 2100, line tension after plug set 1950, plug set time 60 sec. POH and perfed at 18.305-307, 18,180-182. POOH with tools, max pressure for pump down: 9420. Max rate for pump down- 13.12-bpm. Total BBIs pumped-1113 Currently- POOH w/Wire Line
Start Time 17:30	End Time 19:30	Comment Frac Stage #6 All sand placed on formation as per frac design and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .2. After sweeping WB and starting WL in the hole, had leak at goat head. Had to bring FMC out to fix.3. Able to get into job with no issues, pressure remained flat through out job. 4. Had trouble lining out CAT doing job, came off completely at the end of 4ppg to end of job.5. No other issues, overall good job by crew. Placed job completely. Ball Seat Stage Pressures and Rate: 6625 psi @ 15 bpm , 6535 psi Pressure before Seating , 6625 psi Pressure after Seating WG-36-3.3% (33.3 ) , BC-200-2.4% (1.9 ) , FR-66-3.3% (1.8 ) , Vicon NF-4.3% (8.3 ) , Losurf 300D-5% (7.7 ) MCB 8642-4.8% (1.5 )
Start Time 19:30	End Time 22:00	Comment P&P Stage #7 RIH with guns and Plug to KOP. pumped down guns at 12.0 bpm @ 5530 Psi, @251 fpm, 740 LT, pumped guns to 18,176, Pulled up and got line tension and set plug@ 18,134. Line tension prior to setting plug 2276, line tension after plug set 2036, plug set time 53 sec. POH and perfed at 18.090-092, 17,990-992. POOH with tools, max pressure for pump down: 5812. Max rate for pump down- 12.0-bpm. Total BBIs pumped-526 Pooh w/ Wire Line all guns fire drop ball
Start Time 22:00	End Time 00:00	Comment Frac Stage #7 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .2. Job went well with all proppant placed. Ball Seat Stage Pressures and Rate: 7196 psi @ 15.5 bpm , 4257 psi Pressure before Seating , 7133 psi Pressure after Seating BC-200-4.7% (4 ) , MC S-2010T-2.8% (1 ) Vicon NF-4.3% (5 ) , Losurf 300D-4% (2.9 )
Report Start Date 6/2/2014	Report End Date 6/3/2014	24hr Activity Summary Fracing & P&P
Start Time 00:00	End Time 03:00	Comment P&P Stage #8 RIH with guns and Plug to KOP. pumped down guns at 13.2 bpm @ 5830 Psi, @250 fpm, 775 LT, pumped guns to 17,977, Pulled up and got line tension and set plug@ 17,918. Line tension prior to setting plug 2289, line tension after plug set 1950, plug set time 59 sec. POH and perfed at 17,860-862, 17,780-782. POOH with tools, max pressure for pump down: 5830. Max rate for pump down- 13.2-bpm. Total BBIs pumped-464





Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	03:00	End Time	04:30	Comment
				Frac Stage #8 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pressure turned up during flush. Kicked pumps out one at a time. 3. Last pump kicked out shortly after 6 ppg was on formation. 4. Turned over to flowback. Ball Seat Stage Pressures and Rate: 7539 psi @ 15 bpm , 6250 psi Pressure before Seating , 7539 psi Pressure after Seating WG-36-3.8% (34.7 ) , BC-200-2.4% (1.7 ) , Vicon NF-4.9% (5.2 ) , Losurf 300D-2.5% (1.7 ) 0645am-Went to pressure test before sweeping wellbore after flowback. Noticed a leak on the flow cross. 1st valve from flowback was leaking. Currently-Changing out 1st valve on flow-cross.
Start Time	04:30	End Time	08:00	Comment
				04:20 am Screened out. While Fracing Stage #8, we had All Sand away and we like 90 bbls have flush a way of designed flush the well screened out. In the process of lining up to Flow Well back. We will Flow 600 to 800bbls back and then try to get back into flush. 04:40 am Open well 9,500 psi on well, open on 24/64 8 bpm @ 3,000 psi Flow Back.  Sweep the wellbore Max rate for Wellbore sweep was-9330. Max rate- 26.6. Total bbls pumped-578.
Start Time	08:00	End Time	11:00	Comment
				P&P Stage #9 RIH with guns and Plug to KOP. pumped down guns at 14.5 bpm @ 7910 Psi, @220 fpm, 840 LT, pumped guns to 17,600, Pulled up and got line tension and set plug@ 17,581. Line tension prior to setting plug 1785, line tension after plug set 1510, plug set time 75 sec. POH and perf'd at 17,515-517, 17,445-447. POOH with tools, max pressure for pump down: 7910. Max rate for pump down- 14.5-bpm. Total BBls pumped-527
Start Time	11:00	End Time	12:00	Comment
				Frac stage 9
Start Time	12:00	End Time	15:00	Comment
				P&P Stage #10 RIH with guns and Plug to KOP. pumped down guns at 13 bpm @ 6591 Psi, @250 fpm, 800 LT, pumped guns to 17,390, Pulled up and got line tension and set plug@ 17,382. Line tension prior to setting plug 2217, line tension after plug set 1780, plug set time 60 sec. POH and perf'd at 17,349-351, 17,199-201. POOH with tools, max pressure for pump down: 6780. Max rate for pump down- 13.4-bpm. Total BBls pumped-431
Start Time	15:00	End Time	16:00	Comment
				Frac stage 10 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Due to pressure response from previous stage, reduced job rate to 38bpm. 3. Had small increases in pressure when Xlink fluid reached bottom and midway thru 3.0ppg sand on bottom. 4. CAT line plugged up at start of job, had trouble lining out. 5. No other issues, overall good job able to place job completely. Ball Seat Stage Pressures and Rate: 5960 psi @ 15.5 bpm , 5485 psi Pressure before Seating , 5925 psi Pressure after Seating WG-36-4.3% (41.8 ) , BC-200-3.6% (2.7 ) , MC S-2010T-6.3% (2.2 ) Vicon NF-2.3% (2.3 ) , Losurf 300D-4.9% (3.5 )



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	16:00	End Time
		19:00
Comment P&P Stage #11 RIH with guns and Plug to KOP. pumped down guns at 12.8 bpm @ 5272 Psi, @255 fpm, 258 LT, pumped guns to 17,182, Pulled up and got line tension and set plug@ 17,084. Line tension prior to setting plug 2328, line tension after plug set 1995, plug set time 60 sec. POH and perfed at 17,040-042, 16,940-942. POOH with tools, max pressure for pump down: 5416. Max rate for pump down- 12.8-bpm. Total BBls pumped- 402. POOH with Wireline all guns fire drop ball		
Start Time	19:00	End Time
		20:30
Comment FMC Greases frac Stage HSE Pressure testing Frac Stack. 4500 psi on well, Frac Stage #11 20.50 PM Screened out. While Fracing Stage #11, All 3lb was in formation. We had 5lb on surface when pressure turned up. Pumps kicked out as surface lines were flushed 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .  2. Pressure turned up with 3 ppg on formation and the screws were cut.  3. The pumps kicked out prior to sand clearing all the surface lines.  4. Well turned over to flowback. Ball Seat Stage Pressures and Rate: 5807 psi @ 13.8 bpm , 5290 psi Pressure before Seating , 5807 psi Pressure after Seating WG-36-2.4% (23.4 ), BC-200-2.1% (1.7 ), Vicon NF-4% (3.9 ), Losurf 300D-3.6% (2 )		
Start Time	20:30	End Time
		00:00
Comment 20:50 pm Screened out. While Fracing Stage #11, 9,000 psi on well. @ 21:10 pm open well on 34/64 8 bpm @ 1,900 psi. 22:00 pm 1,900 psi on well, open on 34/64 8 bpm @ 1,900 psi Flow back little sand 23:00 pm- 1,900 psi on well, open on 34/64 8 bpm @ 1,900 psi Flow back sand. 23:30 pm Flow back 366 bbls. Getting back a solid 2" stream of sand. Flow cross & flow line plugged off with sand. Cleaned flow cross out & retrieved frac ball back. Halliburton circulated flow cross & ball catcher clean. Halliburton pumped on flow line 8500psi & could not pump through flow line. Bled pressure off. ND Flow line starting at the flow cross. Looking for sand plug in flow line		
Report Start Date	Report End Date	24hr Activity Summary
6/3/2014	6/4/2014	Fracing & P&P
Start Time	00:00	End Time
		04:00
Comment 01:00 am ND Flow line starting at the flow cross. Looking for sand plug in flow line. From flow cross to flow back tanks plug off, Clean sand out of flow line NU Flow line. B&C quick test is Test Flow back Iron, Newfield Pressure testing Guidelines. 250 psi low / 10,000 psi high. FMC don't have ball catcher valve Weatherford have one said be on location 8:00 am		
Start Time	04:00	End Time
		10:00
Comment B&C quick test is Test Flow back Iron, Newfield Pressure testing Guidelines. 250 psi low / 10,000 psi high.		
Start Time	10:00	End Time
		12:00
Comment Flush the sand out of the frac tree through the flowback flowlines. Finish frac tree flush. Flow well back on 32/64" choke @ 1500 psi flowing back 7 bbls per min. Well gave up sand. Then went back to clean fluid. Total fluid recovered to this point is 415 bbls. We will flow back 500 bbls total and Sweep the well-bore to prepare to P&P stage 12.		



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time 12:00	End Time 13:30	Comment Swept well bore with 825 bbls of clean fluid. Encountered some pressure before reaching full casing volume around 300 bbls. Continued to work rate up 18 bbls per min @ 8250. Dropped rate 13.5 bbls per min @ 8000 psi.
Start Time 13:30	End Time 14:30	Comment Changed out ball catcher on the flowcross. Currently-Pressure testing ball catcher.
Start Time 14:30	End Time 18:30	Comment P&P Stage #12 RIH with guns and Plug to KOP. pumped down guns at 13.2 bpm @ 7,735 Psi, @250 fpm, 810 LT, pumped guns to 17,885, Pulled up and got line tension and set plug@ 17,876. Line tension prior to setting plug 2420, line tension after plug set 1680, plug set time 45 sec. POH and perfed at 16,842-846, 16,700-704. POOH with tools, max pressure for pump down: 7,735. Max rate for pump down- 13.2-bpm. Total BBls pumped- 444. POOH with Wireline all guns fire drop ball
Start Time 18:30	End Time 20:00	Comment Frac Stage #12 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped a 5 ppg max design at 38 bpm. 3. Job went well with all proppant placed Ball Seat Stage Pressures and Rate: 5680 psi @ 14.8 bpm , 5580 psi Pressure before Seating , 5680 psi Pressure after Seating WG-36-3.5% (53.1 ), BC-200-4.9% (5.5 ), FR-66-3.4% (1.1 ), MC S-2010T-4.9% (3 ) Vicon NF-4.6% (8.3 ), Losurf 300D-4.5% (6.3 ) MCB 8642-4% (1.1 )
Start Time 20:00	End Time 22:00	Comment P&P Stage #13 RIH with guns and Plug to KOP. pumped down guns at 13.0 bpm @ 5,440 Psi, @260 fpm, 780 LT, pumped guns to 16,680, Pulled up and got line tension and set plug@ 16,666. Line tension prior to setting plug 2112, line tension after plug set 1796, plug set time 40 sec. POH and perfed at 16,610-614, 16,544-548. POOH with tools, max pressure for pump down: 5,440. Max rate for pump down- 13.0-bpm. Total BBls pumped- 372
Start Time 22:00	End Time 00:00	Comment Frac Stage #13 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped 5 ppg max design at 38 bpm. 3. Job went well with all proppant placed. Ball Seat Stage Pressures and Rate: 7538 psi @ 15.2 bpm , 5940 psi Pressure before Seating , 7536 psi Pressure after Seating WG-36-3.6% (59.8 ), BC-200-3.6% (4.3 ), MC S-2010T-3.9% (1.7 ) Vicon NF-4.1% (6.1 ), Losurf 300D-4.7% (5 )
Report Start Date 6/4/2014	Report End Date 6/5/2014	24hr Activity Summary Fracing & P&P Stages 14 -
Start Time 00:00	End Time 02:00	Comment P&P Stage #14 RIH with guns and Plug to KOP. pumped down guns at 13.0 bpm @ 5,540 Psi, @258 fpm, 780 LT, pumped guns to 16,470, Pulled up and got line tension and set plug@ 16,330. Line tension prior to setting plug 1,750, line tension after plug set 1,542, plug set time 53 sec. POH and perfed at 16,293-297, 16,195-199. POOH with tools, max pressure for pump down: 5,713. Max rate for pump down- 13.0-bpm. Total BBls pumped- 372
Start Time 02:00	End Time 04:00	Comment Frac Stage #14 All sand placed on formation as per frac design and flushed as per design 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .2. Pumped 5 ppg max design at 38 bpm. 3. Job went well with all proppant placed. Ball Seat Stage Pressures and Rate: 6361 psi @ 15 bpm , 5641 psi Pressure before Seating , 6325 psi Pressure after S BC-200-4.5% (5.3 ), MO-67-4.8% (1.4 ), MC S-2010T-3.2% (1.4 ) Vicon NF-4.7% (7 ), Losurf 300D-4.7% (4.2 )



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time 04:00	End Time 06:30	Comment P&P Stage #15 RIH with guns and Plug to KOP. pumped down guns at 13.0 bpm @ 5,250 Psi, @263 fpm, 800 LT, pumped guns to 16,141. Pulled up and got line tension and set plug@ 16,122. Line tension prior to setting plug 1,844, line tension after plug set 1,590, plug set time 50 sec. POH and perfed at 16,056-060, 15,992-996. POOH with tools, max pressure for pump down: 5,380. Max rate for pump down- 13.1-bpm. Total BBIs pumped-349
Start Time 06:30	End Time 07:30	Comment Frac stage 15 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped job at 38bpm and used the 6ppg design. 3. Saw good pressure relief from Acid and Sand when they reached bottom. 4. Able pump place job with no issues, pumped to completion. 5. Several adds off greater than 10%, some off 20% and MC S-2010T the greatest at off -29.9%. Appears to be bad straps but will rebucket test all LA pumps on Blender and Growler.
Start Time 07:30	End Time 10:30	Comment P&P Stage #16 RIH with guns and Plug to KOP. pumped down guns at 13.0 bpm @ 5,235 Psi, @240 fpm, 820 LT, pumped guns to 15,937. Pulled up and got line tension and set plug@ 15,914. Line tension prior to setting plug 2,038, line tension after plug set 1,655, plug set time 60 sec. POOH and perfed at 15,882'-86', 15,817'-21'. POOH with tools, max pressure for pump down: 5,235. Max rate for pump down- 13.0-bpm. Total BBIs pumped-355
Start Time 10:30	End Time 11:30	Comment Frac stage 16 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Saw good pressure relief when Acid reached perfs, didn't see much help from sand. 3. Had pressure increase when 3.0ppg sand reached bottom, reduced rate to 35bpm and held 5ppg prop conc, pressure stabilized. 4. Pressure started to increase, cut prop early at MM. 5. Had turn in pressure while on flush and continued to rise until 5ppg reached bottom, where it leveled out and rolled over to end of job. 6. Able to flush well completely, placed 95260lbs of prop on formation. 7. Good job by crew making adjustments during the job. Ball Seat Stage Pressures and Rate: 6815 psi @ 15.3 bpm , 5865 psi Pressure before Seating , 6835 psi Pressure after Seating
Start Time 11:30	End Time 14:30	Comment P&P Stage #17 RIH with guns and Plug to KOP. pumped down guns at 12.9 bpm @ 6,016 Psi, @260 fpm, 763 LT, pumped guns to 15,760. Pulled up and got line tension and set plug@ 15,746. Line tension prior to setting plug 2,050, line tension after plug set 1,720, plug set time 30 sec. POOH and perf'd at 15,692'-696', 15,573'-577'. POOH with tools, max pressure for pump down: 6,359. Max rate for pump down- 13.0-bpm. Total BBIs pumped-330
Start Time 14:30	End Time 16:00	Comment Fr4ac Stage #17 @ 16:00 pm Frac Stage # 17 screened out while on flush as 5lb sand hit perfs. Frac details to follow. Currently : preparing to flowback well. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .2. Able to get into job with no issues. 3. While on flush pressure came up shortly after 5ppg reached bottom, pressured out with approx 5200gal left in flush. 4. Left approx 16400lbs in the pipe and placed 84000lbs of prop on formation. Ball Seat Stage Pressures and Rate: 5985 psi @ 14.6 bpm , 5680 psi Pressure before Seating , 5935 psi Pressure after Seating WG-36-3.6% (34.6) , MC S-2010T-2.8% (1 ) Vicon NF-5% (5.2 ) , Losurf 300D-5.1% (3.7 )





Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	16:00	End Time
		19:00
Comment Stage #17 8:15 pm Open well 3,920' psi Started flush 3.3 bpm @ 4,063'. Increase rate 4.9 bpm @ 4,131' psi. Increase rate 8.3 bpm @ 4,415' psi 24 bbls way. Increase rate 10 bpm @ 4,850 psi' 45 bbls way. Increase rate 13 bpm @ 5,120' psi 65 bbls way. Increase rate 14.5 bpm @ 6,740' psi 224 bbls way. Pressure drop 5,870' psi 255 bbls way. Pressure increase 8,976' 424 bbls way. Pressure drop 8,712' 557 bbls way. Increase rate 15.2 bpm @ 8,970 600 bbls way. Drop rate 13 bpm @ 7,880' psi. Total 633 bbls on flush.		
Start Time	19:00	End Time
		21:00
Comment P&P Stage #18 18 RIH with guns and Plug to KOP. pumped down guns at 13.1 bpm @ 8,100' Psi, @ 222' fpm, 750' LT, pumped guns to 15,530', Pulled up and got line tension and set plug @ 15,511. Line tension prior to setting plug 1,880', line tension after plug set 1,660', plug set time 58' sec. POOH and perf'd at 15,453'-457', 15,317'-321'. POOH with tools, max pressure for pump down: 8,848. Max rate for pump down- 13.1-bpm. Total BBIs pumped-420'		
Start Time	21:00	End Time
		23:00
Comment Frac Stage #18, 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped the 5 ppg max design at 38 bpm. 3. Had trouble getting CAT 3/4 going at the beginning of the stage. 4. Job treated well with all proppant placed. WG-36-4.8% (79.6 ), BC-200-4.3% (5.1 ), MC S-2010T-4% (2.3 ) Vicon NF-7.8% (13.6 ),		
Start Time	23:00	End Time
		00:00
Comment RIH w/Wire line P&P Stage #19,		
Report Start Date	Report End Date	24hr Activity Summary
6/5/2014	6/6/2014	Frac Stage 19 to 23 & P&P Stage 19 to 23
Start Time	00:00	End Time
		02:30
Comment P&P Stage #19 RIH with guns and Plug to KOP. pumped down guns at 12.8 bpm @ 5,246' Psi, @ 260' fpm, 786' LT, pumped guns to 15,230', Pulled up and got line tension and set plug @ 15,198. Line tension prior to setting plug 1,967', line tension after plug set 1,655', plug set time 60' sec. POOH and perf'd at 15,142'-46', 15,062'-66'. POOH with tools, max pressure for pump down: 5,246. Max rate for pump down- 12.8-bpm. Total BBIs pumped-286'		
Start Time	02:30	End Time
		03:30
Comment Frac Stage #19, 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water. 2. Pumped 5 ppg max design @ 38 bpm. 3. Job went well with all proppant placed. Ball Seat Stage Pressures and Rate: 5594 psi @ 12 bpm , 5085 psi Pressure before Seating , 5589 psi Pressure after Seating WG-36-2.2% (30.7 ), BC-200-3.1% (3.6 ), MO-67-4.8% (1.4 ), Scalesorb 7-32.2% (47.5 ), MC S-2010T-4.4% (1.9 ) Vicon NF-4.3% (6.1 ), Losurf 300D-4.9% (4.2 )		
Start Time	03:30	End Time
		06:00
Comment P&P Stage #20 RIH with guns and Plug to KOP. pumped down guns at 12.0 bpm @ 5,260' Psi, @ 270' fpm, 760' LT, pumped guns to 15,038', Pulled up and got line tension and set plug @ 14,994. Line tension prior to setting plug 1,950', line tension after plug set 1,578', plug set time 60 sec. POOH and perf'd at 14,927'-31', 14,826'-30'. POOH with tools, max pressure for pump down: 5,260. Max rate for pump down- 12.0 bpm. Total BBIs pumped-278'		
Start Time	06:00	End Time
		07:00
Comment Frac stage #20 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped a 6 ppg max design at 38 bpm. 3. Job went well with all proppant placed.		



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	07:00	End Time
		09:00
Comment P&P Stage #21 RIH with guns and Plug to KOP. pumped down guns at 13.0 bpm @ 5,007' Psi, @ 260' fpm, 760' LT, pumped guns to 14820', Pulled up and got line tension and set plug @ 14,790. Line tension prior to setting plug 2,230', line tension after plug set 1,780', plug set time 60 sec. POOH and perfed at 14,640'-31', 14,735'-30'. POOH with tools, max pressure for pump down: 5,081. Max rate for pump down- 13.1 bpm. Total BBIs pumped-282		
Start Time	09:00	End Time
		10:00
Comment Frac stage 21 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped a 6 ppg max design at 38 bpm. 3. Good job with no problems, pumped job to completion. Ball Seat Stage Pressures and Rate: 5985 psi @ 15.4 bpm , 5380 psi Pressure before Seating , 5900 psi Pressure after Seating BC-200-3.7% (2.7 ) , Scalesorb 7-13.9% (16.1 ) , MC S-2010T-4.2% (1.3 ) Vicon NF-4.7% (4.5 ) , Losurf 300D-3.7% (2.3 )		
Start Time	10:00	End Time
		14:00
Comment P&P stage 22 RIH with guns and Plug to KOP. pumped down guns at 13.2 bpm @ 5,318' Psi, @ 270' fpm, 831' LT, pumped guns to 14,550', Pulled up and got line tension and set plug @ 14,500. Line tension prior to setting plug 2,170', line tension after plug set 1,720', plug set time 50 sec. POOH and perfed at 14,448'-452', 14,331'-335'. POOH with tools, max pressure for pump down: 5,375. Max rate for pump down- 13.5 bpm. Total BBIs pumped-266'		
Start Time	14:00	End Time
		16:00
Comment Frac stage 22 frac is complete. All sand placed on formation and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .2. Pumped a 6 ppg max design at 38 bpm.3. Shut down twice before going to sand, screws wouldn't come on in auto (electronic) & overloaded the screws came off to clean out.4. Down for a total of 40min to fix issues but did not have any problems getting back into interval. 5. Had pressure come up when 6ppg reached bottom, extended 15bbls to get pressure to roll over. Able to flush well competely. 6. No other issues, good job by crew working thru issues. Ball Seat Stage Pressures and Rate: 6295 psi @ 15 bpm , 544 psi Pressure before Seating , 6155 psi Pressure after Seating WG-36-4.7% (61 ) , BC-200-5% (4.8 ) , MC S-2010T-3.7% (1.4 ) Losurf 300D-4.3% (3.2 )		
Start Time	16:00	End Time
		18:00
Comment P&P stage 23 RIH with guns and Plug to KOP. pumped down guns at 13.0 bpm @ 5,855' Psi, @ 254' fpm, 800' LT, pumped guns to 14,240', Pulled up and got line tension and set plug @ 14,201. Line tension prior to setting plug 1,726', line tension after plug set 1,330', plug set time 53 sec. POOH and perfed at 14,145'-149', 13,996'-14,000'. POOH with tools, max pressure for pump down: 6,157'. Max rate for pump down- 13.0 bpm. Total BBIs pumped-212'		
Start Time	18:00	End Time
		20:00
Comment Frac Stage #23 frac is complete. All sand placed on formation and flushed as per design 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped a 6 ppg max design at 38 bpm.3. Job went well with all proppant placed. Ball Seat Stage Pressures and Rate: 5853 psi @ 13.6 bpm , 5374 psi Pressure before Seating , 5849 psi Pressure after Seating BC-200-4% (3.1 ) , MC S-2010T-3.3% (1.1 ) Vicon NF-4.8% (4.7 ) , Losurf 300D-4.5% (2.9 )		
Start Time	20:00	End Time
		21:30
Comment P&P Stage #24 RIH to heel 21:30 pm Started pump down pass the heel transfer pump went down POOH w/ wire line have new on way to location		
Start Time	21:30	End Time
		00:00
Comment Stage #24 POOH w/ wire line have new transfer pump on way to location		
Report Start Date	Report End Date	24hr Activity Summary
6/6/2014	6/7/2014	Frac Stage 24-29 P&P Stage 24-29



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	00:00	End Time	02:00	Comment P&P Stage #24 RIH with guns and Plug to KOP. pumped down guns at 13.0 bpm @ 5,231' Psi, @ 260' fpm, 840' LT, pumped guns to 13,957', Pulled up and got line tension and set plug @ 13,911'. Line tension prior to setting plug 1,580', line tension after plug set 1,380', plug set time 60 sec. POOH and perfed at 13,882'-886', 13,768'-13,772'. POOH with tools, max pressure for pump down: 5,231'. Max rate for pump down- 13.0 bpm. Total BBIs pumped- 222'
Start Time	02:00	End Time	03:00	Comment Stage 24 frac is complete. All sand placed on formation and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped a 6 ppg max design at 38 bpm. 3. Pressure turned up with 6 # on formation. Pumps kicked out as prop conc. Was falling on the perfs. 4. Was able to maintain a low rate and bring rate back up until pressure broke over. 5. Finished flush with 7,111 psi @ 25 bpm. Ball Seat Stage Pressures and Rate: 6202 psi @ 12.6 bpm , 5376 psi Pressure before Seating , 6194 psi Pressure after Seating WG-36-4.2% (41.3 ) , BC-200-5.1% ( 4 ) , MC S-2010T-3.6% ( 1.2 ) Vicon NF-4.6% ( 4.9 ) , Losurf 300D-3.9% ( 2.6 ) , MCB 8642-13% ( 1.7 )
Start Time	03:00	End Time	05:00	Comment P&P #25 RIH with guns and Plug to KOP. pumped down guns at 14.bpm @ 7,142' Psi, @ 236' fpm, 840' LT, pumped guns to 13,738', Pulled up and got line tension and set plug @ 13,696'. Line tension prior to setting plug 1,890', line tension after plug set 1,530', plug set time 60 sec. POOH and perfed at 13,648'-652', 13,564'-13,568'. POOH with tools, max pressure for pump down: 7,542'. Max rate for pump down- 14.0 bpm. Total BBIs pumped-300'
Start Time	05:00	End Time	07:00	Comment Frac Stage #25 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water. 2. Pumped a 6 ppg max design at 38 bpm. 3. Job went well with all proppant placed. Ball Seat Stage Pressures and Rate: 7537 psi @ 17.3 bpm , 6947 psi Pressure before Seating , 7537 psi Pressure after Seating WG-36-12.6% (131.1 ) , BC-200-4.4% ( 3.3 ) , MC S-2010T-3.8% ( 1.2 ) Vicon NF-4.9% ( 4.6 ) , Losurf 300D-4.3% ( 2.7 ) , MCB 8642-20.3% ( 2.5 )
Start Time	07:00	End Time	09:00	Comment P&P #26 RIH with guns and Plug to KOP. pumped down guns at 12.9.bpm @ 5930' Psi, @ 226' fpm, 800' LT, pumped guns to 13,533', Pulled up and got line tension and set plug @ 13,521'. Line tension prior to setting plug 1,720', line tension after plug set 1,380', plug set time 35 sec. POOH and perfed at 13,466'-470', 13,356'-13,360'. POOH with tools, max pressure for pump down: 6550'. Max rate for pump down- 12.9 bpm. Total BBIs pumped-267'
Start Time	09:00	End Time	10:00	Comment Frac stage 26 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water. 2. Pumped a 6 ppg max design at 38 bpm. 3. Stage went well. Ball Seat Stage Pressures and Rate: 5659 psi @ 14.8 bpm , 5388 psi Pressure before Seating , 5670 psi Pressure after Seating WG-36-5.5% (53.2 ) , BC-200-4.6% ( 3.2 ) , Vicon NF-4.8% ( 4.4 ) , Losurf 300D-4.9% ( 2.9 )



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	10:00	End Time
		12:00
Comment P&P #27 RIH with guns and Plug to KOP. pumped down guns at 13..bpm @ 5352' Psi, @ 275' fpm, 790' LT, pumped guns to 13,295', Pulled up and got line tension and set plug @ 13,264. Line tension prior to setting plug 1,770', line tension after plug set 1,420', plug set time 35 sec. POOH and perf'd at 13,215'-219', 13,056'-13,060'. POOH with tools, max pressure for pump down: 5420'. Max rate for pump down- 13.2 bpm. Total BBIs pumped-207'		
Start Time	12:00	End Time
		15:30
Comment Currently waiting on frac to pump acid pill in Aubrey well		
Start Time	15:30	End Time
		16:30
Comment Frac stage 27 frac is complete. All sand placed on formation and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water. 2. Pumped a 6 ppg max design at 38 bpm. 3. Stage went well. Ball Seat Stage Pressures and Rate: 5603 psi @ 14.9 bpm , 5191 psi Pressure before Seating , 5568 psi Pressure after Seating WG-36-8.9% (87.1 ) , BC-200-2.7% (1.8 ) , Vicon NF-5.2% (6.1 ) , Losurf 300D-5.2% (3)		
Start Time	16:30	End Time
		18:30
Comment P&P #28 RIH with guns and Plug to KOP. pumped down guns at 13..bpm @ 5109' Psi, @ 260' fpm, 790' LT, pumped guns to 13,030', Pulled up and got line tension and set plug @ 13,009. Line tension prior to setting plug 2,220', line tension after plug set 1,700', plug set time 40 sec. POOH and perf'd at 12,952'-956', 12,774'-12,778'. POOH with tools, max pressure for pump down: 5121'. Max rate for pump down- 13.0 bpm. Total BBIs pumped-194'		
Start Time	18:30	End Time
		21:00
Comment FMC Greases Frac Stack. Frac stage #28 frac is complete. All sand placed on formation and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water. 2. Pumped a 6 ppg max design at 38 bpm. 3. Stage went well with all proppant placed. Ball Seat Stage Pressures and Rate: 5803 psi @ 13.3 bpm , 5168 psi Pressure before Seating , 5790 psi Pressure after Seating WG-36-2.7% (26.9 ) , BC-200-3.8% (2.8 ) , MC S-2010T-4.2% (1.3 ) Losurf 300D-4% (2.4)		
Start Time	21:00	End Time
		23:00
Comment P&P #29 RIH with guns and Plug to KOP. pumped down guns at 12..bpm @ 5014' Psi, @ 264' fpm, 780' LT, pumped guns to 12,755', Pulled up and got line tension and set plug @ 12,714. Line tension prior to setting plug 7,68', line tension after plug set 1,390', plug set time 36 sec. POOH and perf'd at 12,665'-669', 12,547'-12,551'. POOH with tools, max pressure for pump down: 5090'. Max rate for pump down- 12.0 bpm. Total BBIs pumped-168' Currently-Wireline is POOH with wireline and tools.		
Start Time	23:00	End Time
		00:00
Comment Frac Stage #29 frac is complete. All sand placed on formation and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water. 2. Pumped a 6 ppg max design at 38 bpm. 3. Stage went well with all proppant placed. Ball Seat Stage Pressures and Rate: 5222 psi @ 12.8 bpm , 5085 psi Pressure before Seating , 5222 psi Pressure after Seating WG-36-3.1% (30.6 ) , BC-200-4% (3 ) , MC S-2010T-3.9% (1.2 ) Losurf 300D-3.9% (2.4 )		
Report Start Date	Report End Date	24hr Activity Summary
6/7/2014	6/8/2014	Frac 30-34 P&P 30-35
Start Time	00:00	End Time
		01:30
Comment P&P #30 RIH with guns and Plug to KOP. pumped down guns at 12..bpm @ 5014' Psi, @ 264' fpm, 780' LT, pumped guns to 12,755', Pulled up and got line tension and set plug @ 12,714. Line tension prior to setting plug 7,68', line tension after plug set 1,390', plug set time 36 sec. POOH and perf'd at 12,665'-669', 12,547'-12,551'. POOH with tools, max pressure for pump down: 5090'. Max rate for pump down- 12.0 bpm. Total BBIs pumped-168' All guns fire Drop ball.		





Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	01:30	End Time	02:30	Comment
				Frac Stage #30 frac is complete. All sand placed on formation and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped a 6 ppg max design at 38 bpm. 3. Stage went well with all proppant placed. Ball Seat Stage Pressures and Rate: 5586 psi @ 13.7 bpm , 5038 psi Pressure before Seating , 5585 psi Pressure after Seating WG-36-2.8% (24 ) , BC-200-4.8% (3.6 ) , MC S-2010T-3.4% (1 ) Vicon NF-4.8% (4.7 ) , Losurf 300D-4.6% (3.1 )
Start Time	02:30	End Time	04:30	Comment
				P&P Stage #31 RIH with guns and Plug to KOP. pumped down guns at 13..bpm @ 5110' Psi, @ 268' fpm, 780' LT, pumped guns to 12,239', Pulled up and got line tension and set plug @ 12,202'. Line tension prior to setting plug 1,760', line tension after plug set 1,450', plug set time 40 sec. POOH and perf'd at 12,169'-173', 12,029'-12,033'. POOH with tools, max pressure for pump down: 5120'. Max rate for pump down- 13.0 bpm. Total BBIs pumped-154'
Start Time	04:30	End Time	05:30	Comment
				Frac stage 31 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water. 2. Pumped a 6 ppg max design at 38 bpm. 3. Pressure came up with 5 and 6 ppg on . Dropped rate to 33 bpm. 4. Well was successfully flushed with all proppant placed. WG-36-4.9% (43.5 ) , BC-200-4% (3 ) , Scalesorb 7-16.8% (20.1 ) , Vicon NF-4.7% (4.6 ) , Losurf 300D-3.9% (2.6 )
Start Time	05:30	End Time	07:30	Comment
				P&P Stage #32 RIH with guns and Plug to KOP. pumped down guns at 13.1.bpm @ 5675' Psi, @ 230' fpm, 832' LT, pumped guns to 11,999', Pulled up and got line tension and set plug @ 11,992'. Line tension prior to setting plug 1,780', line tension after plug set 1,400', plug set time 35 sec. POOH and perf'd at 11,949'-953', 11,852'-11,856'. POOH with tools, max pressure for pump down: 6745'. Max rate for pump down- 13.1 bpm. Total BBIs pumped-199'
Start Time	07:30	End Time	08:30	Comment
				Frac stage 32 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .  2. Pumped a 6 ppg max design at 38 bpm. WG-36-2.4% (23.4 ) , BC-200-4.3% (3 ) , MC S-2010T-4.1% (1.1 ) Vicon NF-3.5% (3.1 ) ,
Start Time	08:30	End Time	10:30	Comment
				P&P Stage #33 RIH with guns and Plug to KOP. pumped down guns at 13.3.bpm @ 5774' Psi, @ 246' fpm, 850' LT, pumped guns to 11,750', Pulled up and got line tension and set plug @ 11,734'. Line tension prior to setting plug 1,550', line tension after plug set 1,260', plug set time 55 sec. POOH and perf'd at 11,690'-694', 11,592'-11,596'. POOH with tools, max pressure for pump down: 6070'. Max rate for pump down- 13.3 bpm. Total BBIs pumped-160'



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time 10:30	End Time 11:30	Comment Frac stage 33 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .  2. Pumped a 6 ppg max design at 38 bpm.  3. Pressure slope changed with about half of 5# placed. Started to climb quickly. Reduced rate to try and address pressure. Continued to rose through end of flush. Screened out just as 6# hit formation.  Ball Seat Stage Pressures and Rate: 5381 psi @ 15.2 bpm , 5039 psi Pressure before Seating , 5388 psi Pressure after Seating Scalesorb 7-4.3% (4.5 ) , Losurf 300D-6.2% (3.4 ) 81.6% OF THE DESIGNED PROPPANT WAS PLACED IN THE FORMATION.  81,598 LBS OF PROPPANT PLACED IN THE FORMATION. 21,655 LBS OF PROPPANT LEFT IN CASING.
Start Time 11:30	End Time 15:30	Comment Opened well up and flowed back 464 bbls. Pumped back in on lateral sweep. Pumped 280 bbls and could not get pressure to roll over. Decision made to flow well back another 520 bbls and try to get the ball up. Currently-Changing out the ball catcher and preparing to flow well back again. Opened well back up and flowed well back. 1340pm- 10.8BPM on 38/64" choke @2700 psi. total returned-81.8 1430pm- 9.2 BPM on 31/64" choke @ 2400 psi. total returned- 141.2 Finished flowing well to 550 bbls total. Checked the ball catcher and the ball was there. Prepare to sweep the well and turn over to wireline.
Start Time 15:30	End Time 16:30	Comment Finished flowing back well to clean fluid. 550 bbls total. Pump 15 bbls acid Swept well bore with 416 bbls of clean fluid. Encountered some pressure before reaching full casing volume around 260 bbls. Continued to work rate up 20 bbls per min @ 7,300.
Start Time 16:30	End Time 18:00	Comment P&P Stage #34 RIH with guns and Plug to KOP. pumped down guns at 12.5.bpm @ 5,649' Psi, @ 272' fpm, 784' LT, pumped guns to 11,517', Pulled up and got line tension and set plug @ 11,443. Line tension prior to setting plug 1,475', line tension after plug set 1,125', plug set time 55 sec. POOH and perfed at 11,413'-417', 11,358'-11,362'. POOH with tools, max pressure for pump down: 6,058'. Max rate for pump down- 13.0 bpm. Total BBls pumped-112'
Start Time 18:00	End Time 19:00	Comment Stage 34 frac is complete. All sand placed on formation and flushed as per design.  1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .  2. Pumped a 5 ppg max design at 38 bpm.  3. Stage went well. Ball Seat Stage Pressures and Rate: 6288 psi @ 15.1 bpm , 5595 psi Pressure before Seating , 6312 psi Pressure after Seating Vicon NF-2.4% (3.4 ) ,



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	19:00	End Time
		21:00
Comment		
P&P Stage #35 RIH with guns and Plug to KOP. pumped down guns at 13..bpm @ 5,282' Psi, @ 280' fpm, 800' LT, pumped guns to 11,332', Pulled up and got line tension and set plug @ 11,272. Line tension prior to setting plug 1,412', line tension after plug set 1.212', plug set time 40 sec. POOH and perfed at 11,233'-237', 11,120'-11,124'. POOH with tools, max pressure for pump down: 5,565'. Max rate for pump down- 13.0 bpm. Total BBIs pumped-112'		
Start Time	21:00	End Time
		23:30
Comment		
FMC Greases Frac Stage		
Start Time	23:30	End Time
		00:00
Comment		
Currently Frac Stage #35		
Report Start Date	Report End Date	24hr Activity Summary
6/8/2014	6/9/2014	Frac & P&P 35-42 Set 2 kill Plugs
Start Time	00:00	End Time
		01:00
Comment		
Frac Stage #35		
1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .		
2. Pumped a 6 ppg max design at 38 bpm.		
3. Stage went well. Ball Seat Stage Pressures and Rate: 6960 psi @ 14.6 bpm , 5966 psi Pressure before Seating , 6650 psi Pressure after Seating		
WG-36-2.9% (45.7 ) , BC-200-3.9% (4.4 ) , MO-67-4.9% (1.4 ) , MC S-2010T-5% (1.9 ) , Losurf 300D-4.2% (3.5 )		
Start Time	01:00	End Time
		02:30
Comment		
P&P Stage #36 RIH with guns and Plug to KOP. pumped down guns at 13..bpm @ 5,110' Psi, @ 270' fpm, 760' LT, pumped guns to 11,112', Pulled up and got line tension and set plug @ 11,064. Line tension prior to setting plug 1,418', line tension after plug set 1.187', plug set time 52 sec. POOH and perfed at 11,031'-035', 10,936'-940'. POOH with tools, max pressure for pump down: 5,110'. Max rate for pump down- 13.0 bpm. Total BBIs pumped-102'		
Start Time	02:30	End Time
		03:30
Comment		
Frac stage 36		
1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water.		
2. Pumped a 5 ppg max design at 38 bpm.		
3. Stage went well.		
WG-36-3.1% (49.9 ) , BC-200-4.6% (5.2 ) , MC S-2010T-4.1% (1.6 ) Losurf 300D-4.5% (4 )		
Start Time	03:30	End Time
		05:00
Comment		
P&P Stage #37 RIH with guns and Plug to KOP. pumped down guns at 13..bpm @ 5,200' Psi, @ 280' fpm, 720' LT, pumped guns to 10,790', Pulled up and got line tension and set plug @ 10,774. Line tension prior to setting plug 1,445', line tension after plug set 1.230', plug set time 48 sec. POOH and perfed at 10,747'-751', 10,692'-696'. POOH with tools, max pressure for pump down: 5,314'. Max rate for pump down- 13.0 bpm. Total BBIs pumped-86'		
Start Time	05:00	End Time
		06:00
Comment		
Frac stage #37		
1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water.		
2. Pumped a 6 ppg max design at 38 bpm.		
3. Stage went well with all proppant placed.Ball Seat Stage Pressures and Rate: 6179 psi @ 12.7 bpm , 5287 psi Pressure before Seating , 6125 psi Pressure after Seating		
WG-36-3.3% (36.9 ) , BC-200-3.9% (3.1 ) ,MC S-2010T-4.2% (1.3 ) Vicon NF-2.4% (2.3 ) , Losurf 300D-4.5% (2.9 )		



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	06:00	End Time	07:30	Comment P&P Stage #38 RIH with guns and Plug to KOP. pumped down guns at 13..bpm @ 6,450' Psi, @ 195' fpm, 800' LT, pumped guns to 10,625', Pulled up and got line tension and set plug @ 10,604. Line tension prior to setting plug 1,508', line tension after plug set 1.170', plug set time 40 sec. POOH and perf'd at 10,565'-569', 10,463'-467'. POOH with tools, max pressure for pump down: 6456'. Max rate for pump down- 13.0 bpm. Total BBls pumped-114'
Start Time	07:30	End Time	08:30	Comment Frac stage 38 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water. 2. Pumped a 6 ppg max design at 38 bpm. 3. Good job with no problems, place job completely. Ball Seat Stage Pressures and Rate: 5900 psi @ 15.2 bpm , 5445 psi Pressure before Seating , 5860 psi Pressure after Seating WG-36-5.3% (49.4 ) , BC-200-5.2% (3.5 ) , Vicon NF-4.7% (4 ) , Losurf 300D-13.8% (7.4 )
Start Time	08:30	End Time	10:00	Comment P&P Stage #39 RIH with guns and Plug to KOP. pumped down guns at 13.1.bpm @ 4,940' Psi, @ 265' fpm, 814' LT, pumped guns to 10,420', Pulled up and got line tension and set plug @ 10,389. Line tension prior to setting plug 1,555', line tension after plug set 1.220', plug set time 40 sec. POOH and perf'd at 10,343'-347', 10,213'-217'. POOH with tools, max pressure for pump down: 5023'. Max rate for pump down- 13.1 bpm. Total BBls pumped-77'
Start Time	10:00	End Time	11:00	Comment Frac stage 39 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water. 2. Pumped a 6 ppg max design at 38 bpm. 3. Pressure came up at start of flush, reduced rate to 34bpm to line out pressure. 4. No problems flushing well, placed job completely. Ball Seat Stage Pressures and Rate: 5780 psi @ 15.4 bpm , 5220 psi Pressure before Seating , 5750 psi Pressure after Seating WG-36-2.3% (21.8 ) , BC-200-4.4% (3.1 ) , Vicon NF-5.3% (4.5 ) , Losurf 300D-4.9% (2.8 )
Start Time	11:00	End Time	12:30	Comment P&P Stage #40 RIH with guns and Plug to KOP. pumped down guns at 13..bpm @ 5,880' Psi, @ 230' fpm, 805' LT, pumped guns to 10,150', Pulled up and got line tension and set plug @ 10,142. Line tension prior to setting plug 1,420', line tension after plug set 1.125', plug set time 40 sec. POOH and perf'd at 10,110'-114', 10,016'-020'. POOH with tools, max pressure for pump down: 5910'. Max rate for pump down- 13. bpm. Total BBls pumped-69'
Start Time	12:30	End Time	13:30	Comment Frac stage 40 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped a 6 ppg max design at 38 bpm.  3. Good job with no problems, place job completely. Ball Seat Stage Pressures and Rate: 6230 psi @ 15.2 bpm , 5465 psi Pressure before Seating , 6215 psi Pressure after Seating  WG-36-2.5% (24.5 ) , BC-200-4.8% (3.3 ) , Vicon NF-4.9% (4.2 ) , Losurf 300D-4% (2.1 )





Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	13:30	End Time
		15:00
Comment P&P Stage #41 RIH with guns and Plug to KOP. pumped down guns at 13.5.bpm @ 5,337' Psi, @ 225' fpm, 800' LT, pumped guns to 9980', Pulled up and got line tension and set plug @ 9966. Line tension prior to setting plug 1,294', line tension after plug set 1.060', plug set time 86 sec. POOH and perf'd at 9908'-9912', 9771'-9775'. POOH with tools, max pressure for pump down: 5395'. Max rate for pump down- 13.5 bpm. Total BBIs pumped-59'		
Start Time	15:00	End Time
		16:00
Comment Frac stage 41 frac is complete. All sand placed on formation and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water .2. Pumped a 6 ppg max design at 38 bpm.3. Good job with no problems, placed completely. Ball Seat Stage Pressures and Rate: 5705 psi @ 15.2 bpm , 5280 psi Pressure before Seating , 5690 psi Pressure after Seating Vicon NF-4.9% (4.1 ) , Losurf 300D-4.9% (2.6 )		
Start Time	16:00	End Time
		17:30
Comment P&P Stage #42 RIH with guns and Plug to KOP. pumped down guns at 13.bpm @ 5,300' Psi, @ 268' fpm, 800' LT, pumped guns to 9600', Pulled up and got line tension and set plug @ 9,593. Line tension prior to setting plug 1,440', line tension after plug set 1.075', plug set time 36 sec. POOH and perf'd at 9556'-9560', 9510'-9514'. POOH with tools, max pressure for pump down: 5300'. Max rate for pump down- 13 bpm. Total BBIs pumped-34'		
Start Time	17:30	End Time
		18:30
Comment Frac Stage #42 frac is complete. All sand placed on formation and flushed as per design. 1. Global Kick Outs set at 9500 psi. Pressure tested to 10800 psi. Job pumped with Produced Water . 2. Pumped a 6 ppg max design at 38 bpm. 3. Good job with no problems, pumped to completion. Ball Seat Stage Pressures and Rate: 5705 psi @ 15.2 b 995 psi Pressure before Seating , 5695 psi Pressure after Seating. Losurf 300D-3.2% (1.7 )		
Start Time	18:30	End Time
		22:00
Comment RIH with Kill Plug #1. SICP @ 3,300 psi. Set 1st Halliburton 10k Bridge Plug @ 8,636' with tension before and after 1620/1500 setting in 36 seconds. Bleed well to 0 psi. RIH with Kill Plug #2. Set 2nd Halliburton 10k Bridge Plug @ 8,606' with tension before and after 1770/1570 setting in 56 seconds. Shut Well In.		
Start Time	22:00	End Time
		00:00
Comment RDMO J-W Wire Line		
Report Start Date	Report End Date	24hr Activity Summary
6/9/2014	6/10/2014	Work suspended until frac on Aubrey complete
Start Time	00:00	End Time
		06:00
Comment Well Shut In		
Start Time	06:00	End Time
		15:00
Comment RD Halliburton Frac Crew 15:00 pm Currently Halliburton has finished RD all Equip .ND 7 1/16" 10k frac stack 10K 7-1/16" 'Upper Master' manual frac valve , 10K 7-1/16" flowcross with dual, double 4-1/16" outlets, 10K 7-1/16" 'Crown' manual frac valve .		
Start Time	15:00	End Time
		00:00
Comment well operations suspended until Aubrey 1A is frac'ed.		
Report Start Date	Report End Date	24hr Activity Summary
6/10/2014	6/11/2014	Work suspended until frac on Aubrey complete
Start Time	00:00	End Time
		00:00
Comment well work suspended until frac on Aubrey is complete		
Report Start Date	Report End Date	24hr Activity Summary
6/11/2014	6/12/2014	Well work suspended until frac on Aubrey is complete



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time		End Time		Comment
00:00		00:00		Well work suspended until frac on Aubrey is complete
Report Start Date	Report End Date	24hr Activity Summary		
6/12/2014	6/13/2014	Well work suspended until frac on Aubrey is complete		
Start Time		End Time		Comment
00:00		00:00		Well work suspended until frac on Aubrey is complete
Report Start Date	Report End Date	24hr Activity Summary		
6/13/2014	6/14/2014	Well work suspended until frac on Aubrey is complete		
Start Time		End Time		Comment
00:00		00:00		Well work suspended until frac on Aubrey is complete
Report Start Date	Report End Date	24hr Activity Summary		
6/14/2014	6/15/2014	Well work suspended until frac on Aubrey is complete		
Start Time		End Time		Comment
00:00		00:00		Well work suspended until frac on Aubrey is complete
Start Time		End Time		Comment
00:00		12:00		Well work suspended until frac on Aubrey is complete
Start Time		End Time		Comment
12:00		14:00		NU and test BOP stack.
Start Time		End Time		Comment
14:00		00:00		Well work suspended until frac on Aubrey is complete
Report Start Date	Report End Date	24hr Activity Summary		
6/15/2014	6/16/2014	Well work suspended until frac on Aubrey is complete		
Start Time		End Time		Comment
00:00		00:00		Well work suspended until frac on Aubrey is complete
Report Start Date	Report End Date	24hr Activity Summary		
6/16/2014	6/17/2014	Well work suspended until frac on Aubrey is complete		
Start Time		End Time		Comment
00:00		00:00		Well work suspended until frac on Aubrey is complete
Report Start Date	Report End Date	24hr Activity Summary		
6/17/2014	6/18/2014	Well ops suspended until Frac on Aubrey is complete		
Start Time		End Time		Comment
00:00		00:00		Well work suspended until frac on Aubrey is complete.
Report Start Date	Report End Date	24hr Activity Summary		
6/18/2014	6/19/2014	Rd HES Frac Team and MIRU WOR Nabors 1406		
Start Time		End Time		Comment
00:00		00:00		Getting Ready to RU WOR to start drillout
Report Start Date	Report End Date	24hr Activity Summary		
6/19/2014	6/20/2014	MIRU WOR. PU WS.		
Start Time		End Time		Comment
00:00		07:00		Waiting on WOR to get to location and RU and start the drill out process.
Start Time		End Time		Comment
07:00		10:00		WOR showed up on location at 07:00 and is spotted in and they are starting to get RU.
Start Time		End Time		Comment
10:00		13:00		Nabors WOR is in the air and we are still in the process of getting equipment spotted and the workstring moved.
Start Time		End Time		Comment
13:00		18:00		Continue MIRU.
Start Time		End Time		Comment
18:00		19:30		Inspect 2-3/8", 5.95#. PH6, P110 tbg.
Start Time		End Time		Comment
19:30		20:30		PU 4.610: OD concave 2-3/8" PAC 4-Blade Mill(1.25" ID x2.90"); PH6 box x 2-3/8" PAC box Double Flapper Bit Sub (2.950" OD x 1.250" ID x 2.15" L); 1 jt 2-3/8", 5.95#. PH6, P110 tbg; 2-3/8" PH6 box x 2-3/8" pin RN nipple (2.909" OD x 1.710" ID x .64" L); and 10 jts 2-3/8", 5.95#. PH6, P110 tbg.



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	End Time	Comment
20:30	21:15	Slips were not biting and allowing tbg to slip. SD 45 min to get another set of new slips with new dies.
Start Time	End Time	Comment
21:15	21:45	PU 10 jts 2-3/8" PH6 WS. Pipe continued slipping through the new slips.
Start Time	End Time	Comment
21:45	23:45	Tried adjusting the ram, didn't help. Tapped slips with a hammer when setting, no help. Checked the dies, they are brand new. Tried using a 36" pipe wrench to close the slips, still would not set. Wait on manual slips and pipe clamp.
Start Time	End Time	Comment
23:45	00:00	PU 5 jts 2-3/8", 5.95#. PH6, P110 tbg . Ttl 25 jts IH.
Report Start Date	Report End Date	24hr Activity Summary
6/20/2014	6/21/2014	Drill out plugs
Start Time	End Time	Comment
00:00	06:00	PU 2-3/8", 5.95#, PH6, P110 tbg filling pipe every 1000'.
Start Time	End Time	Comment
06:00	08:00	We pick up the power swivel and tagged up on the tight spot at 6,170' according to the tally. The log shows a csg collar at 6,168'. We milled on the tight spot for about 15 minutes showing torque on the swivel and about two pts of weight loss on the weight indicator. Once we got through the tight spot we pick up back through it didn't see anything. We went in and of the tight spot approx. about 15 times before picking up another jt of tbg. We will lay the swivel back and and continue to RIH to the first kill at 8,606'.
Start Time	End Time	Comment
08:00	11:00	Continue to PU 2-3/8" PH6 WS and RIH after the tight spot
Start Time	End Time	Comment
11:00	18:00	Tagged first kill plug at 8606' on jt #281, Up weight 52k, down weight 49k, neutral 50k. 700 free torque, 1200 drill torque. WOB: 4 pts., RPM @ 100. 3.3bpm in @ 2000psi, 3.5bpm out @500psi on 40/64" choke. 31 minutes to drill plug. Pumped 77bbls water with .7 gal of western chemical FR to 1000gals. Pumped 5bbl gel sweep.  Tagged up on the second kill pad @ 11:45 at 8,636' jt 282. Started drilling it out at 1900psi @ 3.3bpm. Returns were at 1500psi @ 3.5bpm. Took the top of the plug off and took a pressure kick up to 3500psi @ 6.75bpm on a 37/64 choke. Tried drilling on the second plug but the annular bag kept leaking so we have shut the top set of pipe rams in and are flowing the back at 2bpm at 3550psi on a 22-24/64 choke. We are still flowing at that rate and pressure on the flowback side right now. We are trying to flow the pressure of the well down right now.
Start Time	End Time	Comment
18:00	19:00	WH pressure 3300 psi. 1500 psi hydraulic pressure on annular bag. Hang back swivel and PU 2-3/8", 5.95#, PH6, P110 tbg. Flowing 1.6 bpm on 14/64 choke at 3400 psi while PU tbg.
Start Time	End Time	Comment
19:00	20:00	19:05 Tag plug #41 on jt #313 with 15' up at 9614' by tally. PU swivel. WH 3500 psi. Pump pressure 3900 psi at 2.1 bpm. Returns 2.4 bpm at 3400 psi on 21/64" choke. WOB 6K at 100 RPM, drilling torque 1800, free torque 1500. Up weight 38K, N 35K, Down weight 30K. Pumped 76 bbl water with .7 gal/1000 bbl FR. Pump 10 bbl sweep. 36 minutes to drill.
Start Time	End Time	Comment
20:00	21:00	Circulate while setting tbg on pipe rack and tallying it
Start Time	End Time	Comment
21:00	22:00	Swivel would not rotate to the left. Made connections with a pipe wrench until mechanic arrived. Temporarily repaired valve in control panel.
Start Time	End Time	Comment
22:00	23:00	22:09 Tag plug #40 on jt #325 with 10' up at 9991' by tally. WH 3300 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.5 bpm at 3400 psi on 19/64" choke. WOB 6K at 100 RPM, drilling torque 1700, free torque 1300. Up weight 42K, N 35K, Down weight 29K. Pumped 72 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 28 minutes to drill plug. Replace control panel for swivel while circulating and reciprocating pipe.



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	23:00	End Time
		00:00
Comment		
Encountered frac sand on jt 326 at 10,015'. Circulate sand OH while PU tbgs. Swivel quit rotating. Put kelly hose on tbgs to circulate while changing out swivels.		
Report Start Date	Report End Date	24hr Activity Summary
6/21/2014	6/22/2014	Drill out plugs
Start Time	00:00	End Time
		01:00
Comment		
Change out swivel while circulating down tbgs.		
Start Time	01:00	End Time
		02:00
Comment		
01:19 Tag plug #39 on jt #331 with 15' up at 10,171' by tally. WH 3200 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.6 bpm at 3400 psi on 22/64" choke. WOB 6K at 100 RPM, drilling torque 2000, free torque 1400. Up weight 40K, N 35K, Down weight 33K. Pumped 63 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 25 minutes to drill plug.		
Start Time	02:00	End Time
		03:00
Comment		
02:25 Tag plug #38 on jt #339 with 15' up at 10,417' by tally. WH 3200 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.5 bpm at 3300 psi on 19/64" choke. WOB 6K at 100 RPM, drilling torque 2000, free torque 1700. Up weight 40K, N 36K, Down weight 30K. Pumped 74 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 28 minutes to drill plug		
Start Time	03:00	End Time
		04:00
Comment		
03:30 Tag plug #37 on jt #346 with 15' up at 10,632' by tally. WH 3200 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.5 bpm at 3300 psi on 21/64" choke. WOB 6K at 100 RPM, drilling torque 2100, free torque 1600. Up weight 41K, N 36K, Down weight 30K. Pumped 68 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 28 minutes to drill plug		
Start Time	04:00	End Time
		05:00
Comment		
04:28 Tag plug #36 on jt #351 with 4' up at 10,797' by tally. WH 3200 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.6 bpm at 3200 psi on 19/64" choke. WOB 6K at 100 RPM, drilling torque 2100, free torque 1700. Up weight 41K, N 36K, Down weight 31K. Pumped 82 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 30 minutes to drill plug		
Start Time	05:00	End Time
		07:00
Comment		
06:05 Tag plug #35 on jt #361 with 25' out at 11,142' by tally. WH 3200 psi. Pump pressure 3400 psi at 2.2 bpm. Returns 2.5 bpm at 3200 psi on 20/64" choke. WOB 6K at 100 RPM, drilling torque 2000, free torque 1700. Up weight 40K, N 35K, Down weight 30K. Pumped 92 bbl water with .5 gal/1000 bbl Western Chemical FR and 10 bbl sweep. 28 minutes to drill plug		
Start Time	07:00	End Time
		10:30
Comment		
07:20 Tag plug #34 on jt #368 with 29' out at 11,294' by tally. WH 2100 psi. Pump pressure 4200 psi at 2.5 bpm. Returns 2 bpm at 2900 psi on 20/64" choke. WOB 6K at 100 RPM, drilling torque 2100, free torque 1700. Up weight 43K, N 40K, Down weight 33K. Pumped 72 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 29 minutes to drill plug.		
Start Time	10:30	End Time
		11:30
Comment		
08:27 Tag plug #33 on jt #373 with 9' out at 11,2468' by tally. WH 3000 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.5 bpm at 3000 psi on 19/64" choke. WOB 6K at 100 RPM, drilling torque 2100, free torque 1700. Up weight 44K, N 38K, Down weight 33K. Pumped 70 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 30 minutes to drill plug.		





Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time 11:30	End Time 14:00	Comment 11:50 Tag plug #32 on jt #383 with 28' out at 11,756' by tally. WH 3100 psi. Pump pressure 4100 psi at 2.0 bpm. Returns 3.0 bpm at 2900 psi on 23/64" choke. WOB 6K at 100 RPM, drilling torque 2100, free torque 1900. Up weight 47K, N 40K, Down weight 36K. Pumped 57 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 25 minutes to drill plug.  13:00 Tag plug #31 on jt #391 with 15' out at 12,016' by tally. WH 3300 psi. Pump pressure 4000 psi at 2.0 bpm. Returns 2.7 bpm at 3000 psi on 22/64" choke. WOB 6K at 100 RPM, drilling torque 2200, free torque 1700. Up weight 46K, N 38K, Down weight 34K. Pumped 80 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 36 minutes to drill plug.
Start Time 14:00	End Time 15:30	Comment For the Second time in 24 hours a basic power swivel broke down on us. they are going to bring out a third power swivel to us.
Start Time 15:30	End Time 17:00	Comment Basic Mechanic came out and changed out the control panel on the power swivel and got it fixed and we are RU it back up now. Basic is also bring out another power swivel to set off to the side of location just in case. Started RIH at 15:30.
Start Time 17:00	End Time 18:00	Comment 16:42 Tag plug #30 on jt #398 with 20' out at 12,223' by tally. WH 3300 psi. Pump pressure 4000 psi at 2.0 bpm. Returns 2.1 bpm at 3100 psi on 21/64" choke. WOB 5K at 100 RPM, drilling torque 2200, free torque 1700. Up weight 47K, N 41K, Down weight 35K. Pumped 113 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 38 minutes to drill plug.
Start Time 18:00	End Time 19:00	Comment 18:02 Tag plug #29 on jt #404 at 10,797' by tally. WH 3000 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.8 bpm at 3000 psi on 28/64" choke. WOB 6K at 100 RPM, drilling torque 2300, free torque 1800. Up weight 47K, N 41K, Down weight 35K. Pumped 83 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 32 minutes to drill plug.
Start Time 19:00	End Time 20:30	Comment 19:42 Tag plug #28 on jt #415 at 10,12,740' by tally. WH 3200 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.6 bpm at 3200 psi on 20/64" choke. WOB 6K at 100 RPM, drilling torque 2400, free torque 1850. Up weight 40K, N 38K, Down weight 25K. Pumped 108 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 42 minutes to drill plug.
Start Time 20:30	End Time 22:00	Comment 21:15 Tag plug #27 on jt #424 at 13,039' by tally. WH 3000 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.8 bpm at 3000 psi on 26/64" choke. WOB 6K at 100 RPM, drilling torque 2200, free torque 1900. Up weight 41K, N 31K, Down weight 26K. Pumped 05 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 40 minutes to drill plug.
Start Time 22:00	End Time 23:00	Comment Circulate bottoms up with 170 bbl.
Start Time 23:00	End Time 00:00	Comment 23:40 Tag plug #26 on jt #432 at 13,294' by tally. WH 3200 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.4 bpm at 3200 psi on 19/64" choke. WOB 6K at 100 RPM, drilling torque 2400, free torque 2000. Up weight 41K, N 36K, Down weight 26K. Pumped 58 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 25 minutes to drill plug.
Report Start Date 6/22/2014	Report End Date 6/23/2014	24hr Activity Summary Drill out plugs
Start Time 00:00	End Time 01:30	Comment 01:00 Tag plug #25 on jt #441 at 13,552' by tally. WH 3150 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.7 bpm at 3150 psi on 21/64" choke. WOB 6K at 100 RPM, drilling torque 2500, free torque 2000. Up weight 40K, N 36K, Down weight 26K. Pumped 100 bbl water with .7 gal/1000 bbl FR and 10 bbl sweep. 35 minutes to drill plug



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	01:30	End Time	04:30	Comment
				02:16 Tag plug #24 on jt #447 at 13,747' by tally. WH 3100 psi. Pump 4100 psi as 2.5 bpm. Returns 2.8 bpm at 3100 psi on 21/64" choke. WOB 5K at 100 RPM. Drilling torque 2600, free torque 2000. Up wt 40K, N 36K, Down weight 26K. Drilled on plug 14 minutes when torqued up. PU to 60K, no movement. 43" stretch in tbg with 22K PU. Pump 2-10 bbl sweeps and circulate at 3.5 bpm. Work tbg between 25K and 80K with 3400 torque. Worked free. Drilled through plug in 27 minutes. Total 41 minutes to drill plug. Circulated 321 bbl while drilling plug and working tbg
Start Time	04:30	End Time	05:30	Comment
				Pump 10 bbl sweep and circulate bottoms up with 310 bbl water.
Start Time	05:30	End Time	06:30	Comment
				06:17 - Tag plug #23 on jt #454 29'out at 13,925' by tally. WH 3200 psi. Pump pressure 4400 psi at 2.2 bpm. Returns 2.5 bpm at 3100 psi on 27/64" choke. WOB 5K at 100 RPM, drilling torque 2600, free torque 1900. Up weight 41K, N 36K, Down weight 29K. Pumped 88 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 27 minutes to drill plug.
Start Time	06:30	End Time	10:30	Comment
				07:55 - Tag plug #22 on jt #463 28'out at 14,229' by tally. WH 3100 psi. Pump pressure 4400 psi at 2.3 bpm. Returns 2.7 bpm at 3100 psi on 27/64" choke. WOB 5K at 100 RPM, drilling torque 2100, free torque 2000. Up weight 52K, N 41K, Down weight 35K. Pumped 95 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 35 minutes to drill plug.  09:45 - Tag plug #21 on jt #473 20'out at 14,527' by tally. WH 3100 psi. Pump pressure 4400 psi at 2.3 bpm. Returns 2.5 bpm at 3100 psi on 27/64" choke. WOB 5K at 100 RPM, drilling torque 2100, free torque 2000. Up weight 52K, N 41K, Down weight 35K. Pumped 64 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 27 minutes to drill plug.
Start Time	10:30	End Time	12:00	Comment
				11:19 - Tag plug #20 on jt #482 14'out at 14,820' by tally. WH 3200 psi. Pump pressure 4500 psi at 2.5 bpm. Returns 2.75 bpm at 3100 psi on 24/64" choke. WOB 5K at 100 RPM, drilling torque 2600, free torque 1800. Up weight 51K, N 41K, Down weight 35K. Pumped 104 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 31 minutes to drill plug.
Start Time	12:00	End Time	14:30	Comment
				Pumped a bottoms up from 14,820
Start Time	14:30	End Time	17:00	Comment
				14:36 - Tag plug #19 on jt #488 1'out at 15,517' by tally. WH 3200 psi. Pump pressure 4500 psi at 2.1 bpm. Returns 3.1 bpm at 3100 psi on 19/64" choke. WOB 5K at 100 RPM, drilling torque 2800, free torque 2100. Up weight 60K, N 41K, Down weight 32K. Pumped 111 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 61 minutes to drill plug.  16:04 - Tag plug #18 on jt #495 8'out at 15,226' by tally. WH 3200 psi. Pump pressure 4500 psi at 2.4 bpm. Returns 3.0 bpm at 3100 psi on 21/64" choke. WOB 5K at 100 RPM, drilling torque 2700, free torque 2200. Up weight 60K, N 41K, Down weight 32K. Pumped 96 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 36 minutes to drill plug.  3rd R-Nipple is at on top of jt #488 15,018'.
Start Time	17:00	End Time	18:30	Comment
				17:30 - Tag plug #17 on jt #505, 4'out at 15,527' by tally. WH 3000 psi. Pump pressure 4100 psi at 2.1 bpm. Returns 2.6 bpm at 3000 psi on 23/64" choke. WOB 5K at 100 RPM, drilling torque 2800, free torque 2100. Up weight 55K, N 41K, down weight 33K. Pumped 32 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 41 minutes to drill plug.



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	18:30	End Time 20:00
		Comment 18:52 - Tag plug #16 on jt #513, 10'out at 15,778' by tally. WH 3100 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.7 bpm at 3100 psi on 21/64" choke. WOB 5K at 100 RPM, drilling torque 2700, free torque 2100. Up weight 48K, N 39K, down weight 31K. Pumped 94 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 38 minutes to drill plug.
Start Time	20:00	End Time 21:30
		Comment Circulate bottoms up with 265 bbl water. Rotate and reciprocate pipe while circulating.
Start Time	21:30	End Time 23:00
		Comment 21:06 - Tag plug #15 on jt #518, 2'out at 15,778' by tally. WH 3100 psi. Pump pressure 4500 psi at 2.2 bpm. Returns 2.2 bpm at 3100 psi on 19/64" choke. WOB 5K at 100 RPM, drilling torque 2600, free torque 2100. Up weight 48K, N 39K, down weight 32K. Pumped 115 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 28 minutes to drill plug.
Start Time	23:00	End Time 00:00
		Comment 23:00 - Tag plug #14 on jt #525, 10'out at 16,147' by tally. WH 3000 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 3.1 bpm at 3000 psi on 22/64" choke. WOB 5K at 100 RPM, drilling torque 2800, free torque 2300. Up weight 48K, N 39K, down weight 31K. Pumped 136 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 64 minutes to drill plug.
Report Start Date 6/23/2014	Report End Date 6/24/2014	24hr Activity Summary Drill out plugs
Start Time	00:00	End Time 02:00
		Comment 01:05 - Tag plug #13 on jt #532, 15'out at 16,257' by tally. WH 3000 psi. Pump pressure 4200 psi at 2.2 bpm. Returns 2.4 bpm at 3000 psi on 19/64" choke. WOB 5K at 100 RPM, drilling torque 2800, free torque 2350. Up weight 48K, N 39K, down weight 31K. Pumped 91 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 46 minutes to drill plug.
Start Time	02:00	End Time 03:30
		Comment 02:45 - Tag plug #12 on jt #542, 10'out at 16,667' by tally. WH 3100 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.8 bpm at 3100 psi on 21/64" choke. WOB 6K at 100 RPM, drilling torque 2600, free torque 2100. Up weight 47K, N 39K, down weight 31K. Pumped 97 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 42 minutes to drill plug.
Start Time	03:30	End Time 05:30
		Comment Circulate bottoms up with 326 bbl water. Rotate and reciprocate pipe while circulating.
Start Time	05:30	End Time 07:30
		Comment 05:25 Tag plug #11 on jt #550, 15'out at 16,903' by tally. WH 3200 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.5 bpm at 3000 psi on 20/64" choke. WOB 5-7K at 100 RPM, drilling torque 2600, free torque 2100. Up weight 47K, N 39K, down weight 30K. Pumped 106 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 35 minutes to drill plug.  06:44 Tag plug #10 on jt #557, 30'out at 17,084' by tally. WH 3200 psi. Pump pressure 4000 psi at 2.5 bpm. Returns 2.7 bpm at 3000 psi on 20/64" choke. WOB 5-7K at 100 RPM, drilling torque 2800, free torque 2300. Up weight 47K, N 39K, down weight 30K. Pumped 78 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 30 minutes to drill plug.
Start Time	07:30	End Time 10:30
		Comment 08:05 Tag plug #9 on jt #566, 10'out at 17,382' by tally. WH 3100 psi. Pump pressure 4400 psi at 2.1 bpm. Returns 2.6 bpm at 3100 psi on 20/64" choke. WOB 5-7K at 100 RPM, drilling torque 2800, free torque 2300. Up weight 57K, N 42K, down weight 33K. Pumped 80 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 39 minutes to drill plug.  09:50 Tag plug #8 on jt #573, 20'out at 17,581' by tally. WH 3100 psi. Pump pressure 4400 psi at 2.1 bpm. Returns 2.5 bpm at 3100 psi on 20/64" choke. WOB 5-7K at 100 RPM, drilling torque 3000, free torque 2600. Up weight 56K, N 42K, down weight 33K. Pumped 140 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 67 minutes to drill plug.



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	10:30	End Time
		14:30
Comment Pumped a bottom up after tagged the nextplug		
Start Time	14:30	End Time
		17:30
Comment 14:30 Tag plug #7 on jt #580, 20'out at 17,918' by tally. WH 3100 psi. Pump pressure 4300 psi at 2.5 bpm. Returns 3.0 bpm at 3000 psi on 18/64" choke. WOB 5-7K at 100 RPM, drilling torque 2900, free torque 2400. Up weight 56K, N 42K, down weight 33K. Pumped 91 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 37 minutes to drill plug.  15:50 Tag plug #6 on jt #587, 15'out at 18,135' by tally. WH 3100 psi. Pump pressure 4500 psi at 2.5 bpm. Returns 3.0 bpm at 3000 psi on 18/64" choke. WOB 5-7K at 100 RPM, drilling torque 3000, free torque 2500. Up weight 60K, N 42K, down weight 31K. Pumped 131 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 46 minutes to drill plug.		
Start Time	17:30	End Time
		19:00
Comment 17:44- Tag plug #5 on jt #597, 6'out at 18,364' by tally. WH 3100 psi. Pump pressure 4300 psi at 2 bpm. Returns 2.1 bpm at 3100 psi on 17/64" choke. WOB 5K at 100 RPM, drilling torque 3100, free torque 2500. Up weight 60K, N 42K, down weight 31K. Pumped 78 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep and 85 bbl. 35 minutes to drill plug. Had 2.5 jts sand above plug.		
Start Time	19:00	End Time
		20:00
Comment 19:25- Tag plug #4 on jt #604, 20'out at 18,557' by tally. WH 3000 psi. Pump pressure 4200 psi at 2 bpm. Returns 2.6 bpm at 3000 psi on 19/64" choke. WOB 6K at 100 RPM, drilling torque 3100, free torque 2500. Up weight 60K, N 42K, down weight 31K. Pumped 186 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 71 minutes to drill plug.		
Start Time	20:00	End Time
		21:00
Comment Circulate bottoms up with 265 bbl water. Rotate and reciprocate pipe while circulating.		
Start Time	21:00	End Time
		22:30
Comment 22:12- Tag plug #3 on jt #612, 15'out at 18,816' by tally. WH 3100 psi. Pump pressure 4200 psi at 2.5 bpm. Returns 2.7 bpm at 3100 psi on 20/64" choke. WOB 7K at 100 RPM, drilling torque 2500, free torque 2000. Up weight 65K, N 38K, down weight 30K. Pumped 78 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 37 minutes to drill plug.		
Start Time	22:30	End Time
		00:00
Comment 23:45 - Tag plug #2 on jt #619, 20'out at 19,035' by tally. WH 3100 psi. Pump pressure 4100 psi at 2.5 bpm. Returns 2.7 bpm at 3100 psi on 20/64" choke. WOB 7K at 100 RPM, drilling torque 2500, free torque 2000. Up weight 65K, N 38K, down weight 30K. Pumped 28 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 10 minutes to drill plug.		
Report Start Date	Report End Date	24hr Activity Summary
6/24/2014	6/25/2014	Drill out plugs.
Start Time	00:00	End Time
		01:30
Comment 00:40 - Tag plug #1 on jt #626, 3'out at 19,257' by tally. WH 3000 psi. Pump pressure 4000 psi at 2.5 bpm. Returns 3 bpm at 3100 psi on 20/64" choke. WOB 7K at 100 RPM, drilling torque 2500, free torque 2000. Up weight 50K, N 38K, down weight 30K. Pumped 78 bbl water with .5 gal/1000gal Western Chemical FR and 10 bbl sweep. 32 minutes to drill plug. Clean out to 19,353' with 629 jts IH.		
Start Time	01:30	End Time
		06:00
Comment Pump 10 bbl sweep, 20 bbl spacer, ten bbl sweep, then 920 bbl for 2.5 times bottoms up. Pump 4500 psi, 4 bbl in/4.5 bbl out. 23/64" choke at 2900 psi. Rotate and reciprocate pipe while circulating. We circulated are bottoms up using 946bbls we checked returns on flowback before shutting down. We shut the well in at 06:10. Pulled 5joints with the swivel. We are currently laying the swivel back and will continue to Pull the workstring OOH.		
Start Time	06:00	End Time
		13:00
Comment Currently still pulling PH6 workstring out of hole and laying down.		
Start Time	13:00	End Time
		14:00
Comment Currently still pulling PH6 workstring out of hole and laying down. There are 293joints (9,018')left in the well as of now with 3200psi on the well. We are going to do a bottoms up here before we pull through the KOP.		





Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	14:00	End Time
		16:30
Comment		
Currently still pulling PH6 workstring out of hole and laying down. There are 267joints (8,218')left in the well as of now with 3200psi on the well.		
Plan forward: Continue to LD work string until we get to 7,000' with 228joints and land the well.		
Start Time	16:30	End Time
		17:30
Comment		
We are at landing depth 7,019' with 228 joints and land the well. We will do a bowl wash to clean the stack and bowl out. Then land the well with two joints of 2 3/8th 8rd EUE L-80 1jt on top of the hanger and 1jt on the bottom of the hanger. Then ND annular bag and RU Mountain States snubbing unit.		
Start Time	17:30	End Time
		21:00
Comment		
Wash tbg hanger bowl with 30 bbl 180 degree water. Flush FB lines with 5 bbl. Land tbg. 3200 psi on csg. Pressure wash BOP stack.		
Start Time	21:00	End Time
		22:00
Comment		
Perform 10 minute negative test on hanger. Pressure test against pipe rams to 250 psi low/ 10,000 psi high. Bleed off pressure.		
Start Time	22:00	End Time
		00:00
Comment		
RD floor and tongs. ND annular and single ram BOP.		
Report Start Date	Report End Date	24hr Activity Summary
6/25/2014	6/26/2014	LD tbg
Start Time	00:00	End Time
		02:30
Comment		
NU snubbing unit.		
Start Time	02:30	End Time
		05:30
Comment		
Function and pressure test snubbing unit BOP stack 250 psi low/ 5000 psi high and annular to 3500 psi per Newfield's pressure testing guidelines.		
Start Time	05:30	End Time
		06:30
Comment		
We unlocked the tbg hanger by turning out the hanger pins out to 4 5/8". Then we started to Pull the hanger out of the well and lost the TIW valve and a joint of 2 3/8" 6.5# L-80 that was screwed in to the top of the Cameron Wellhead hanger. The Joint blew out of the Snubbing and BOP stack. I shut the Blind shear rams and held well under control.		
Start Time	06:30	End Time
		17:30
Comment		
Been on location discussing what happened this morning with the hanger incident. SDFN awaiting orders		
Start Time	17:30	End Time
		22:00
Comment		
Wash inside of SU BOP stack with 35 bbl 180 degree water. I Pressure was outside of BOP stack. stack with		
Start Time	22:00	End Time
		00:00
Comment		
ND snubbing unit.		
Report Start Date	Report End Date	24hr Activity Summary
6/26/2014	6/27/2014	ND snubbing unit
Start Time	00:00	End Time
		06:30
Comment		
NU and test WL BOP and lubricator. Test WL lubricator 250 psi low/ 5000 psi high per Newfield's standard. RIH with 4.625 gauge ring. Correlate to J-W Gamma Ray log dated 29 May, 2014. Tag fish at 7,012' from surface. POOH. All tools recovered. Tight spot in csg collar at 6168'. RD MO WL truck.		
Start Time	06:30	End Time
		12:30
Comment		
Organizing vendors to check the blind shears rams and pipe rams on the 7 1/16" 10k BOP stack.		
Start Time	12:30	End Time
		14:30
Comment		
All the vendors are here we held a PJSM discussing the plan for the day to go thru the BOP stack and get everything changed over to 2 7/8" pipe rams, check the blind shear rams and everything else.		
Start Time	14:30	End Time
		22:30
Comment		
Finish the RU snubbing unit. Test blind rams and 2-7/8" pipe rams in double ram BOP and BOP stack in snubbing unit 250 low/ 5000 high per Newfield guidelines. Change annular element to a Shaffer element. Test annular to 3500 psi. Prod tbg has been placed on pipe racks and tallied.		



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	22:30	End Time 00:00
Comment Wait on daylight to snub production tbg IH.		
Report Start Date 6/27/2014	Report End Date 6/28/2014	24hr Activity Summary NU and test snubbing unit
Start Time	00:00	End Time 07:00
Comment Wait on day light to snub IH.		
Start Time	07:00	End Time 11:00
Comment We just got done holding a PJSM with everybody on location to discuss the operations of the day. When the time comes we will be starting snubbing operations. We will make up the BHA Which consists of a Notched Collar or similar (not flat bottom), ~2' pup jt of 2-7/8" 6.5# EUE L-80, ~4' Perforated sub 2-7/8" 6.5# EUE L-80, Weatherford 10k ceramic burst disk, 2-7/8"XN Nipple (2.313" ID w/ 2.205" No-go), 1 jt of 2-7/8" 6.5# EUE L-80, 2-7/8" X Nipple (2.313" ID) and 2-7/8" 6.5# EUE L-80 to surface EOT will be around 6,870'. We will be tallying in the hole as we RIH.		
Start Time	11:00	End Time 00:00
Comment The Mountain States snubbing unit will be down probably until in the morning. We still only have 13joints snubbed in the hole. Mountain States is still working on the unit. The Problem is they have to replace one of the hydraulic legs completely. The well has 3400psi on it and the 7 1/16" 10k BOP 2 7/8" pipe rams are shut and locked along with number 1's on the snubbing unit.		
Report Start Date 6/28/2014	Report End Date 6/29/2014	24hr Activity Summary Repair snubbing unit
Start Time	00:00	End Time 12:00
Comment Replace jack on snubbing unit.		
Start Time	12:00	End Time 14:00
Comment The flowcross valves are off and out of the way. The blind flange is on and tight. Mountain States will try and get the Jack leg assembly off the snubbing unit.		
Start Time	14:00	End Time 16:00
Comment The snubbing unit is fixed. We worked the jacks up and down several times then we picked up a joint of pipe and the snubbing operator performed a pull test against the rig. Operator said his gauges were right where they were supposed to be. We then Held a PJSM and talked about the hazards of pulling tbg out of the hole. So, we will lay down the 12 joints that are in the hole. Then we will shut the blind rams and HCR valve to secure the well. We will then get the valves back in the BOP stack flowcross and get them tested. Then at that time we will but the snubbing unit skid back on the unit.		
Start Time	16:00	End Time 18:00
Comment We are out of the hole and the blind rams and HCR are shut the well is secure. We will get the valves back in the BOP stack flowcross and get them tested. Then at that time we will but the snubbing unit skid back on the unit.		
Start Time	18:00	End Time 20:00
Comment Install wing valves on flow cross. Hook up FB line. Pressure test wing valves and FB line 250 psi low/5000 psi high per Newfield guidelines. Clean location and prep for snubbing IH.		
Start Time	20:00	End Time 00:00
Comment Wait for day light to snub production tbg IH.		
Report Start Date 6/29/2014	Report End Date 6/30/2014	24hr Activity Summary Repair snubbing unit
Start Time	00:00	End Time 07:00
Comment Wait for day light to snub production tbg IH.		
Everybody's here on location that will be here all day we held a PJSM discussing the events of this morning and all the hazards that come with snubbing in the hole. So, we will get going here in the next few minutes		
Plan forward: Run in 20 joints and fill the tbg. According to our calculations that we all have done somewhere around 90-95joints we should be pipe heavy.		



Well Name: Ranch 16-10-3-3-2WH

## Summary Rig Activity

Start Time	07:00	End Time	09:30	Comment
				We have 40jts in the hole we are filling the tbq again.
				Plan forward: Fill tbq every 20 joints and somewhere around 90-95 joints we should be pipe heavy.
Start Time	09:30	End Time	12:00	Comment
				We have 108jts 3,515.12' in the hole. 3600psi on the well. We are getting close to pipe heavy.
Start Time	12:00	End Time	18:00	Comment
				We have 212jts 6,851.14' in the hole with 3700psi on the well. We will hold a Safety meeting to talk about landing the hanger in the bowl. We will then do a bowl wash and lad the hanger in the bowl. Then pressure test the hanger to NFX testing procedures.
Start Time	18:00	End Time	20:00	Comment
				Perform bowl wash with 30 bbl 180 degree water and wash out FB lines with 5 bbls. Land prod tbq with TWCV in tbq hanger. Ran 2-7/8" 6.5#, EUE 8rd, L-80 production tbq as follows: 2-7/8" N-80 notched collar (2.875" OD x 2.688" ID x .65' L), 2-7/8" x 2.10' N-80 pup jt, 2-7/8" x 4.10' N-80 perforated sub, 2-7/8" 10K single ceramic burst disc(2.875" OD x 2.441" ID x .8' L), 1 jt 2-7/8" L-80 tbq, 2-7/8" OD x 2.313" ID x 1.15' L X-nipple, and 211 jts tbq to surface. EOT at 6,851.14'. Fish at 7,012'. Perform 10 minute negative test on hanger. Pressure test hanger to 250 psi low/ 10K high. Tested good.
Start Time	20:00	End Time	00:00	Comment
				Wash off and ND snubbing unit and BOP stack.
Report Start Date	Report End Date	24hr Activity Summary		
6/30/2014	7/1/2014	Turn Well over to production		
Start Time	00:00	End Time	01:00	Comment
				ND BOP stack. ND HCR valve.
Start Time	01:00	End Time	02:00	Comment
				NU 10K production tree. Pressure test to 250 psi low/ 10,000 psi high. Pull TWCV.
Start Time	02:00	End Time	06:00	Comment
				Wait on day light to rig down.
Start Time	06:00	End Time	08:00	Comment
				RDMO WOR. Turn well over to Production

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Patented
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> RANCH 16-10-3-3-2WH
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0280 FNL 0201 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 14 Township: 03.0S Range: 02.0W Meridian: U		<b>9. API NUMBER:</b> 43013521720000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NORTH MYTON BENCH
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 4/11/2014	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input checked="" type="checkbox"/> OTHER	
	OTHER: <span style="border: 1px solid black; padding: 2px;">Daily Drilling Reports</span>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. As per our conversation with Dustin Doucet, attached find the Daily Drilling Reports for the above mentioned well.		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          January 22, 2016</b>		
<b>NAME (PLEASE PRINT)</b> Mandie Crozier	<b>PHONE NUMBER</b> 435 646-4825	<b>TITLE</b> Regulatory Tech
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/21/2016	



**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Job Category	Job Start Date	Job End Date

**Daily Operations**

Report Start Date 1/12/2014	Report End Date 1/13/2014	24hr Activity Summary Set 80' of 20" conductor pipe.
Start Time 00:00	End Time 00:00	Comment Pete Martin Rig #16 spudded 26" hole on 01/12/2014 and drilled to 80' GL. Set 20", 52.78# (0.250" wall), SA53B conductor pipe at 80' GL and cemented to surface with Redi Mix. Kylan Cook notified UDOGM and BLM by e-mail @ 20:00 PM on 01/10/2014 to spud conductor hole on 01/12/2014.
Report Start Date 1/17/2014	Report End Date 1/18/2014	24hr Activity Summary Rig up Pro Petro Rig #10.
Start Time 20:00	End Time 00:00	Comment Move rig over (Pad Well) from Aubrey 1A-15-22-3-2WH. Rigging up.
Report Start Date 1/18/2014	Report End Date 1/19/2014	24hr Activity Summary Finish rigging up. Pick up directional BHA. Trip in hole to 80' GL. Spud 17 1/2" surface hole. Drill from 80' GL to 545' GL. Change rubber size in rotating head. Drill from 545' GL to 1070' GL.  Surface hole survey depths are from ground level.
Start Time 00:00	End Time 07:30	Comment Finish rigging up. Replace hydraulic pump on rig while rigging up.
Start Time 07:30	End Time 09:00	Comment Start picking up directional BHA. Trip in hole to 80' GL.
Start Time 09:00	End Time 17:00	Comment Spud 17 1/2" hole @ 09:00 AM on 01/18/2014. Drill from 80' GL to 545' GL while picking up directional tools.  Slide: 249' to 277' - TFO=225M Slide: 277' to 305' - TFO=215M Slide: 305' to 333' - TFO=200M Slide: 471' to 498' - TFO=130M
Start Time 17:00	End Time 17:30	Comment Change rubber size in rotating head.
Start Time 17:30	End Time 00:00	Comment Drill from 545' GL to 1070' GL.  Slide: 860' to 950' - TFO=50M
Report Start Date 1/19/2014	Report End Date 1/20/2014	24hr Activity Summary Drill from 1070' GL to 1370' GL. Replace hydraulic pump on rig. Drill from 1370' GL to TD @ 1660' GL. Circulate. Make wiper trip.  Surface hole survey depths are from ground level.
Start Time 00:00	End Time 05:30	Comment Drill from 1070' GL to 1370' GL.  Slide: 1310' to 1370' - TFO=110M
Start Time 05:30	End Time 15:30	Comment Replace main hydraulic pump on rig.
Start Time 15:30	End Time 20:30	Comment Drill from 1370' GL to TD @ 1660' GL. TD 17 1/2" hole @ 20:30 PM on 01/19/2014.
Start Time 20:30	End Time 22:00	Comment Circulate for wiper trip.

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

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Start Time 22:00		End Time 00:00	Comment Trip out to drill collars. No tight hole while tripping out. Trip back to bottom. Had to wash last 90' back to bottom.
Report Start Date 1/20/2014	Report End Date 1/21/2014	24hr Activity Summary Circulate. Trip out of hole. Run surface casing. Circulate casing. Weld top cap. Cement surface casing. Good cement to surface. Wait on cement, clean pits, and rig down.	
Start Time 00:00		End Time 00:30	Comment Finish wiper trip back to bottom. Had to wash last 90' back to bottom.
Start Time 00:30		End Time 01:30	Comment Circulate to trip out of hole and run surface casing.
Start Time 01:30		End Time 08:00	Comment Trip out of hole to run surface casing. Lay down directional BHA.
Start Time 08:00		End Time 09:00	Comment Rig up to run surface casing. No water flow.
Start Time 09:00		End Time 14:00	Comment Run 38 joints (1640.29') of 13 3/8", 54.5#, J-55, BT&C casing with Top-Co guide shoe and float collar. 14 centralizers spaced 10' from the shoe, on top of joints #2 & #3 then every 3rd collar to surface. Landed @ 1640.29' GL, Float Collar @ 1594.04' GL. Had to wash last 4 joints of casing down.
Start Time 14:00		End Time 15:00	Comment Circulate with casing on bottom.
Start Time 15:00		End Time 16:30	Comment Weld top cap from casing to conductor pipe.
Start Time 16:30		End Time 17:30	Comment Circulate casing with rig pump. Rig up Halliburton Cementers.
Start Time 17:30		End Time 21:00	Comment Cement Job: Pumped 10 bbls fresh water & 20 bbls gelled water flush ahead of cement.  Lead: Mixed and pumped 490 sacks (207 bbls) of Varicem Cement with 0.125 #/sk Poly-E-Flake and 0.25 #/sk Kwik Seal. Mixed cement @ 12.0 ppg with yield of 2.37 cf/sk.  Tail: Mixed and pumped 805 sacks (205 bbls) of Densecem Cement. Mixed cement @ 16.2 ppg with yield of 1.43 cf/sk.  Displaced cement with 247 bbls fresh water. Bumped plug with 1400# @ 20:50 PM on 01/20/2014. Floats held. 100 bbls cement to surface. Shut in well after pumping stopped.  Kylan Cook notified UDOGM and BLM of the surface casing & cement job via e-mail on 01/18/2014 @ 23:30 PM.
Start Time 21:00		End Time 00:00	Comment Wait on cement, clean pits, and rig down.
Report Start Date 1/21/2014	Report End Date 1/22/2014	24hr Activity Summary Wait on cement, clean pits, and rig down. Release rig @ 07:00 AM on 01/21/2014.	
Start Time 00:00		End Time 07:00	Comment Wait on cement, clean pits, and rig down.  Release rig @ 07:00 AM on 01/21/2014.
Report Start Date 2/10/2014	Report End Date 2/11/2014	24hr Activity Summary Finish preparation of location for drilling rig.	

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time 00:00	End Time 00:00	Comment 01/23/2014 - Drill Mouse Hole. 02/05/2014 - Final blade location. 02/06/2014 - Weld on Wellhead. 02/10/2014 - Cement cellar floor up to the top of base plate on wellhead.  SURFACE HOLE DIRECTIONAL SURVEY DEPTHS ARE GROUND LEVEL.  Location is ready for drilling rig.
Report Start Date 3/7/2014	Report End Date 3/8/2014	24hr Activity Summary Skid rig from Aubrey 1A-15-22-3-2WH. NU BOPE. Raise beaver slide. Spot in testers. PJSM with testers.
Start Time 10:00	End Time 13:00	Comment (Start)Skid. Suspend Aubrey 1A-15-22-3-2. Skid rig to the Ranch 16-10-3-3-2WH. Check level of rig. Finish cleaning traps on pits at 11:00. Begin cutting mud weight back with peak centrifuge.
Start Time 13:00	End Time 15:00	Comment (Start) NU BOPE... Nipple up stack and choke line. Raise beaver slide and install pins. Cutting mud wieght back with peak centrifuges. Install flow line. Install night cap on Aubrey.
Start Time 15:00	End Time 16:00	Comment (Stop) Unplanned... Went over near miss installing flow line. While installing flow line with boom line a shackle stuck on the bottom of an off drillers side windwall. This caused it to fall. It struck the shaker skid and became wedged between the sub and the shaker skid. No one was injured and an investigation with Engage management took place. Held JSA to remove wind wall. The JSA for installing the flow line was reviewed and a safety stand down was held on location.
Start Time 16:00	End Time 17:30	Comment (Start) NU BOPE... Continue NU BOPE installing flow line, mud pump extension lines to standpipe, mouse hole sleeve, and rig up air. Spot in testers.
Start Time 17:30	End Time 00:00	Comment (Start) Test BOPE/Csg - HPJSM with B&C quick test and Engage Management Test 1: lower Pipe rams, TIW safety Valve, Well head connection to 250 Psi low and 5000 psi high. Test 2: Top Pipe Rams Inside Choke line valve, inside Kill line (attempted to test lower Kelly Valve but seal leaked on top connection to TIW Valve) to 250 PSI low and 5000 PSI high. Test 3: Upper pipe Rams, Outside Kill line valve, HCR, and TIW to 250 psi low and 5000 psi high. Test 4: Upper Pipe rams, Choke line, Kill line Check valve, upright Gauge valve, inside Manifold valves to 250 Psi low and 5000 Psi high, Test 5: Annular Preventer to 250 Psi Low and 3500 PSI high. Test 6: Perform Full Accumulator Function test Test 7: Dart valve to 250 psi low and 5000 psi High Test 8: Lower Kelly valve and IBOP to 250 psi low and 5000 psi High
Report Start Date 3/8/2014	Report End Date 3/9/2014	24hr Activity Summary Cotinue testing BOPE, Repair mud line Valve and complete testing, Install wear bushing, pick up BHA and trip in hole, Drill float equipment and cement then 10' of formation to 1697'. Perform FIT to 12 ppg EMW. Drill 825' of 12.25" hole to 2521'
Start Time 00:00	End Time 01:00	Comment Continue Testing BOPE Test 9: Test Mud line back to Pumps to 250 psi low and 5000 psi high (found Isolation valve leaking on #2 Pump so valve between Pumps was closed and #1 Pump was tested
Start Time 01:00	End Time 01:30	Comment (Stop)Unplanned - Rig Repair... Repair Isolation Valve on #2 Pump Mud line.

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	End Time	Comment
01:30	04:30	(Start) Test BOPE/Csg... Resume testing BOPE Test 10: Test Mud Line Back to Pumps to retest Isolation valve on #2 Pump to 250 psi low and 500 psi High- Test Passed but a very small leak was observed on the Vibrating hose from the Valve manifold on rig floor to the standpipe in the derrick. (replace Vibrating hose while performing test 11 and 12) Test 11: Pull Test joint form BOP and test Blind rams, outside manifold valves and Check valve on Kill line to 250 psi low and 5000 Psi High Test 12: Cycle manual choke and super choke then test both to 500 psi for 5 min. Test 13: Pull test plug from well head and test Surface casing to 1500 psi for 30 Minutes. Retest Mud line from Top drive to isolation valves on Pumps
Start Time	End Time	Comment
04:30	05:00	(Stop) Unplanned - Rig Repair... Retest Mud line from Top drive to isolation valves on Pumps to 250 psi low and 5000 psi High
Start Time	End Time	Comment
05:00	05:30	Rig Service
Start Time	End Time	Comment
05:30	07:00	(Start) Handle BHA/PU drill pipe.. . Pick up a single Joint of drill pipe and install Wear Bushing in well head and set 4 Locking pins.
Start Time	End Time	Comment
07:00	09:30	Pick up Hughes DP506FX bit, bit sub, and adjustable 1.83deg weatherford motor. Make up same. Pick up and make up pony collar for dual battery system. Make up racked back NMDCs and tool carriers. Install MWD.
Start Time	End Time	Comment
09:30	12:00	(Start) Trip... RIH, install rotating rubber, and tag cement at 1,578'.
Start Time	End Time	Comment
12:00	13:30	(Start) Slip and cut 11 wraps of drill line.
Start Time	End Time	Comment
13:30	14:00	Rig service.
Start Time	End Time	Comment
14:00	17:30	(Start) Drill Shoe Track/FIT. Drill out shoe track with 35rpm, 600gpm, and 10-15WOB. Tagged float collar at 1,618' and shoe at 1,664'. Drill 10' of new formation from 1,686' to 1,696'. Circulate hole clean and a consistent mud weight around. Perform FIT Test with B&C Quicktest FIT Test to 256 PSI with 9.1 ppg for EMW of 12.0 PPG Pickle choke line from manifold to stack then manifold to Buster with Methanol
Start Time	End Time	Comment
17:30	00:00	(START) Drilling Drilled 825' of 12.25" hole from 1696' to 2521' at 127 FPH average ROP with 80% Rotate and 20% Slide Slides: 1762-1782 (20' in 10 Min) @ 70 R GTF, 1855-1880 (25' in 13 min) @ 60 R GTF, 1951-1976 (25' in 10 min) @ 60 R GTF, 2046-2071 (25' in 15 min) @ 30R GTF, 2141'-2171' (30' in 17 min) @ 30R GTF) Total Slide: 125' in 1 hr. Total Rotate: 700' in 5.5 hr. Mud weight at 9.0 with 30 Visc. Screen Shakers up to 2@170 and 1@230 Peak Running 2 centrifuges in strip mode EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed ((No indication of losses or water influx encountered))
Report Start Date	Report End Date	24hr Activity Summary
3/9/2014	3/10/2014	Drilling from 2,521' to 4,443, Pump #2 Broke down with Gear end Failure, Circulate to condition mud and then Pull out of hole to Change out Mud motor for lower circulation rate.



**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	00:00	End Time
		02:00
		Comment
		Drill 279' of 12.25" hole from 2521' to 2800' at an average ROP of 139.5 fph with 80% Rotate and 20% Slide. Slides: 2521-2549 (28' in 20 Min) @ 20 R GTF
		Total Slide: 28' in .5 hr.
		Screen Shakers up to 2@170 and 1@230
		Peak Running 2 centrifuges in strip mode
		EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed
		(No indication of losses or water influx encountered)
Start Time	02:00	End Time
		03:00
		Comment
		Dailight Savings time Change - Non Billable
Start Time	03:00	End Time
		05:30
		Comment
		Drill 446' of 12.25" hole from 2800' to 3,246' at an average ROP of 178.5 fph.
		EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed
Start Time	05:30	End Time
		06:00
		Comment
		Rig Service.
Start Time	06:00	End Time
		16:00
		Comment
		Drill 1,068' of 12.25" hole from 3,246' to 4,314' at an average ROP of 106.8 fph.
		Slides:
		3,559' - 3,589' (30') GTF 50R
		4,030' - 4,060' (30') GTF 50R
		4,125' - 4,155' (30') GTF 50R
Start Time	16:00	End Time
		16:30
		Comment
		Rig Service.
Start Time	16:30	End Time
		18:00
		Comment
		Drill 129' of 12.25" hole from 4,314' to 4,443' at an average ROP of 86 fph.
Start Time	18:00	End Time
		18:30
		Comment
		(Stop) Unplanned - Rig Repairs. #2 Mud Pump gear end main bearing failure.
		Pump #2 Completely disabled. Parts and repair men scheduled to arrive
		at 12:00 PM on Monday 3/10/14
		Circulation limited to 505 GPM so drilling was suspended.
Start Time	18:30	End Time
		22:00
		Comment
		Pumped High visc sweeps to clean hole and treated mud to increase viscosity and lower water loss then.
		Mix and pump slug to dry pipe.
Start Time	22:00	End Time
		00:00
		Comment
		(Start)Trip. JSA & PJSM / Pull out of the hole from 4408' to 1610' while monitoring well on trip tank.
Report Start Date	Report End Date	24hr Activity Summary
3/10/2014	3/11/2014	Pull out of hole to 142. Handle & Change BHA & bit.Trip in hole to TD. Drill 12 1/4" intermediate from 4443' to 5214'
Start Time	00:00	End Time
		01:30
		Comment
		Trip out to BHA. No abnormal drag. Hole slick. Well took proper fill while tripping.
Start Time	01:30	End Time
		04:00
		Comment
		Stand back NMDC. Drain motor, break bit, break off bit sub, and motor. Lay down same. Pick up new Hughes bit and Weatherford 8" motor. make up same. Make up NMDC stand.
Start Time	04:00	End Time
		04:30
		Comment
		Pick up 1 stand of HWDP to test motor.
Start Time	04:30	End Time
		05:30
		Comment
		TIH from BHA to 1,602'
Start Time	05:30	End Time
		06:00
		Comment
		Rig Service.
Start Time	06:00	End Time
		08:00
		Comment
		TIH from 1,602' to 4,300'.

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

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Start Time	08:00	End Time	09:00	Comment
				Wash last stand and a single down to TD 4,443' with 120 spm, 502gpm, 40rpm.
Start Time	09:00	End Time	16:30	Comment
				(Start) Drilling... Drill 435' of 12 1/4" intermediate section from 4,443' to 4,878' with an average ROP of 58'. 100% Rotation ETA on pump Mechanics:10:00pm tonight.
Start Time	16:30	End Time	17:00	Comment
				Lubricate Rig - Service Draw Works, Top Drive, ST-80, Catwalk, Rotating head and Blocs & Crown.
Start Time	17:00	End Time	00:00	Comment
				Drill 336' of 12.25" hole from 4878' to 5214' at an average ROP of 48 fph with 80% Rotate and 20% Slide. Slides: 4878-4912 (34' in 1 hr.) @ 110R gtf, 5164' - 5194 (30' in 1 hr.) @ 45R gtf Total Slide: 64' in 2 hr. Total Rotating: 272' in 5 hr Mud weight: 9.5 ppg with 50 Visc. Shale shakers 1/200 2/200 3/170 Peak Running 2 centrifuges in strip mode EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed (No indication of losses or water influx encountered)

Report Start Date	Report End Date	24hr Activity Summary
3/11/2014	3/12/2014	Drilling from 5214 to 6113'

Start Time	00:00	End Time	04:30	Comment
				Drill 234' of 12.25" hole from 5214' to 5448' at an average ROP of 52 fph with 505 GPM, 100% Rotate  Mud weight: 9.5 ppg with 50 Visc. Peak Running 2 centrifuges in strip mode EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed (No indication of losses or water influx encountered)
Start Time	04:30	End Time	05:00	Comment
				(JSA) Lubricate Rig - Service and inspect Top Drive, Blocks, Draw Works, ST-80 and Catwalk
Start Time	05:00	End Time	17:30	Comment
				Drill 475' of 12.25" hole from 5,448' to 5,923' at an average ROP of 56.7 fph with 505 GPM, Slides: 5,637' - 5,675' (38') 2hrs at 45 right GTF 5,732' - 5,749' (20') 1.5hrs at 45 right GTF 5,827' - 5,847' (20') 1.5 hrs at 45 right GTF Total Slide: 78' in 5 hours Total Rotate: 379' in 7.5 hours Mud weight: 9.5 ppg with 50 Visc. Peak Running 2 centrifuges in strip mode EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed (No indication of losses or water influx encountered) Cameron is pulling apart pump #2. Parts have not arrived on location.
Start Time	17:30	End Time	18:00	Comment
				(JSA) Lubricate Rig - Service and inspect Top Drive, Blocks, Draw Works, ST-80 and Catwalk Tare down and inspect #1 Mud pump Fluid end (Replace 3 suction Valves, 6 Valve Spring, 3 Cap Gaskets)

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time 18:00	End Time 00:00	Comment Drill 190' of 12.25" hole from 5,923' to 6,113' at an average ROP of 31 fph with 505 GPM, Slides: 5,923' - 5,953' (30') 2.5 hrs at 30R GTF 6,110' - 6,113' (3') .25 hrs at 60R GTF Total Slide: 33' in 2.75 hours Total Rotate: 157' in 3.25 hours  Mud weight: 9.5 ppg with 50 Visc. Peak Running 2 centrifuges in strip mode EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed (No indication of losses or water influx encountered) Cameron is pulling apart pump #2. Parts have not arrived on location.
Report Start Date 3/12/2014	Report End Date 3/13/2014	24hr Activity Summary Drilling from 6113 to 6775. Repairs continue on Mud pump #2,-All parts have arrived and teardown and inspection are complete but a very large stress fracture was located in the Pump body that must be repaired prior to assembly.
Start Time 00:00	End Time 00:30	Comment (JSA) Lubricate Rig - Service and inspect Top Drive, Blocks, Draw Works, ST-80 and Catwalk
Start Time 00:30	End Time 15:00	Comment Drill 475' of 12.25" hole from 6,113' to 6,588' at an average ROP of 33 fph with 505 GPM, Slides: 6113' - 6143' (27') 2.5 hrs at 30R GTF 6205' - 6229' (24') 1.5 hrs at 70R GTF 6493' - 6523' (33') 3 hrs at 45R GTF Total Slide: 84' in 7 hours Total Rotate: 391' in 7.5 hours  *H2S Alarm Drill - 02:15 Rock Water Tank #2 triggered H2S alarm and the rig was secured and evacuated (All personnel at muster point #1 in 43 minutes) Mud weight: 9.6 ppg with 47 Visc. Peak Running 2 centrifuges in strip mode 2 Qt's. EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed (No indication of losses or water influx encountered) Cameron is pulling apart pump #2. Parts have not arrived on location.
Start Time 15:00	End Time 15:30	Comment Rig Service.
Start Time 15:30	End Time 18:00	Comment Drill 12.25 vertical section F/ 6588' to 6600' (12') 4.8 fph. 40 rpm, 507 gpm, 350-550 diff. 100% Slide Slides: from 6588-6600 @ 60R  *Recieved 210 Joints of 9 5/8' N-80 casing on CTAP trucks then Cleaned, inspected and drifted then tallied by QT Casing

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time 18:00	End Time 00:00	Comment Drill 175' of 12.25" hole from 6,600' to 6,775' at an average ROP of 29.2 fph with 505 GPM, Slides: 6600' - 6626' (26') 1.5 hrs at 45R GTF 6680' - 6711' (31') 1.75 hrs at 60R GTF Total Slide: 57' in 3.25 hours Total Rotate: 118' in 2.75 hours  Mud weight: 9.6 ppg with 49 Visc. Peak Running 2 centrifuges in strip mode 2 Qt's. EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed (No indication of losses or water influx encountered) Cameron has pump #2 Completely Disassembled ay 20:00 / Parts have not arrived on location however all parts are scheduled to arrive by 02:00 and once prepared installation will begin.
Report Start Date 3/13/2014	Report End Date 3/14/2014	24hr Activity Summary Drilling from 6775 to 7251 and sustain a mud motor failure then circulate and trip out of hole to 110'
Start Time 00:00	End Time 04:00	Comment Drill 94' of 12.25" hole from 6,775' to 6,869' at an average ROP of 23.5 fph with 505 GPM, Slides: 6775' - 6802' (27') 2 hrs at 20R GTF Total Slide: 27' in 2 hours Total Rotate: 67' in 2 hours  Mud weight: 9.6 ppg with 47 Visc. Peak Running 2 centrifuges in strip mode 2 Qt's. EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed (No indication of losses or water influx encountered) Pump #2 Parts arrived on location at 02:00 however at approximately the same time Cameron repair tech's found a crack in pump gear case that must be repaired prior to assembly.
Start Time 04:00	End Time 04:30	Comment (JSA) Lubricate Rig - Service and inspect Top Drive, Blocks, Draw Works, ST-80, Catwalk and IBOP.  (JSA) Teardown and Inspect Fluid end of #1 mud pump - No repairs were needed
Start Time 04:30	End Time 14:00	Comment Drill 12.25 vertical section F/ 6869' to 7251' (382') 40.0 fph. 40 rpm, 507 gpm, 350-550 diff. 100% Rotation
Start Time 14:00	End Time 14:30	Comment Rig Service.
Start Time 14:30	End Time 17:00	Comment Drill 12.25 vertical section F/ 7251' to 7261' (10') 4.0 fph. 40 rpm, 507 Gpm, 350-550 diff. Slides: 7251' - 7261' @ 90R GTF (10') in 2.5 hours
Start Time 17:00	End Time 19:00	Comment (STOP) Unplanned - Motor Failure Circulate & condition hole for Trip, Check Flow, Well Static, Pump Slug. Fill Trip Tank and check for flow. *Build Dry pill (55 Bbl's.) to 11.6 ppg
Start Time 19:00	End Time 23:00	Comment (Start)(JSA) Pull out of hole from 7156' to 1100' Filling hole continuously with Trip tank and recording volumes on trip sheet stopping to check flow at 5100', 3100', 1556' and 1100' with no flow. (JSA) While tripping out the Motorman and Pusher tore down and inspected the #1 Mud Pump replacing 2 Swabs, 2 Liners, and 2 Seat and Discharge valve combo's.



**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

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Start Time 23:00		End Time 23:30	Comment (JSA) Handle BHA - Lay down 1 JT of HWDP and Derrick rack 10 Stds ofr HWDP and Drilling Jars.
Start Time 23:30		End Time 00:00	Comment (JSA) Pull Rotating head rubber
Report Start Date 3/14/2014	Report End Date 3/15/2014	24hr Activity Summary Pick up New Bit and motor then Trip in hole to 7171' and wash 90 to bottom, then continue drilling from 7,261 to 7,666'	
Start Time 00:00		End Time 01:00	Comment (JSA) Racked Monel collars in Derrick, set back MWD sub in mouse hole, brake out and inspect bit #2 then drain and lay down failed mud motor. Graded bit 3,3, BT, A, X, I, CT, TF (Cutters appeared to have impact damage)
Start Time 01:00		End Time 02:00	Comment (JSA) Pickup mud motor (7/8 lobe, 2.12" bend, 7.17' bit to bend) and make up new Drill bit (HTC DP506x). Make bit up with 53k torque, make up MWD sub to motor with 53k torque and Monel collars to MWD sub with 53k torque. Run in hole with 1 stand HWDP flow test tools with 350 GPM (Tested Okay)
Start Time 02:00		End Time 03:00	Comment (JSA) Run in hole with HWDP from 226' to 1093' (Jars at 907')
Start Time 03:00		End Time 03:30	Comment (JSA) Install Rotating Head Rubber.
Start Time 03:30		End Time 04:00	Comment (JSA) Lubricate Rig - Service and inspect Top Drive, Blocks, Draw Works, ST-80, Catwalk and IBOP.
Start Time 04:00		End Time 08:00	Comment Trip in hole from 1093' to 7171' filled pipe at 3000', 5200' and 7171'. Break circulation and wash down 90' ft from 7171' to bottom at 7261
Start Time 08:00		End Time 17:30	Comment (Start) Drill 12.25 vertical section F/ 7261' to 7440' (179') 13 fph. 40 rpm, 507 gpm, 350-550 diff.  Slide: 7261' - 7272' (11') @ 120R GTF, 7343' 7377' (34') @ 120 GTF
Start Time 17:30		End Time 18:00	Comment Rig Service.
Start Time 18:00		End Time 00:00	Comment Drill 226' of 12.25" hole from 7,440' to 7,666' at an average ROP of 37.6 fph with 505 GPM, 100% Rotation Total Rotate: 226' in 6 hours  At 7444' the weight was drilled off to 3 K WOB and rotation increased to 60 RPM then bit was loaded to 15K and drilled off to 3k again maintaining near bottom circulation and high rotation for 6 minutes to clean balling off Bit. (Upon resuming drilling operations with 38K and 55 RPM Rop increased to 55 to 60 FPH)  Mud weight: 9.7 ppg with 44 Visc. Peak Running 2 centrifuges in strip mode 2 Qt's. EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed (No indication of losses or water influx encountered / Gas: 350 BG /1700 conn.)
Report Start Date 3/15/2014	Report End Date 3/16/2014	24hr Activity Summary Drilling from 7666' to 7924' #2 Pump Repair continues in JD field service yard	

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time 00:00	End Time 02:30	Comment Drill 57' of 12.25" hole from 7,666' to 7723' at an average ROP of 22.8 fph with 505 GPM, 100% Rotation Total Rotate: 57' in 2.5 hours  Mud weight: 9.7 ppg with 44 Visc. Peak Running 2 centrifuges in strip mode 2 Qt's. EZ-MUD down pipe on connections and Pump 30 bbl high visc Sweeps as needed (No indication of losses or water influx encountered / Gas: 450 BG /1500 con.)
Start Time 02:30	End Time 03:00	Comment (JSA) Lubricate Rig - Service and inspect Top Drive, Blocks, Draw Works, ST-80, Catwalk and IBOP. Teardown and inspect #1 Pump, Replaced 1 Suction valve guide.
Start Time 03:00	End Time 17:30	Comment Drill 12.25 vertical section F/ 7723' to 7890' (167') 11 fph. 40 rpm, 507 gpm, 350-550 diff.  Slide: 7723' - 7735' (12') in 2.5 hr. @ 150R GTF, 7817' - 7826' (9') 2 hr. @ 150R GTF. 7872' - 7877 (5') in 1.5 hr. @ 160R GTF Total Slide: 26' in 6 hours Total Rotate: 141' in 8.5 hours.
Start Time 17:30	End Time 18:00	Comment Rig Service
Start Time 18:00	End Time 19:00	Comment Drill 22' of 12.25" hole from 7,890' to 7,912' at an average ROP of 22 fph with 505 GPM, 100% Rotation Total Rotate: 22' in 1 hours  Mud weight: 9.7 ppg with 54 Vis. / Gas: 550 BG /1100 con.)
Start Time 19:00	End Time 20:00	Comment (Stop)Trouble Shoot MWD Tool, adjust and double check ground wires, bump signal up to 10 amps then move injection lines and adjust tool from low speed to high speed and back to low speed.
Start Time 20:00	End Time 00:00	Comment (Start)Drill 12' of 12.25" hole from 7,912' to 7,924' at an average ROP of 3 fph with 505 GPM, 100% Slide Total Slide: 12' in 4 hours  (Mud weight: 9.7 ppg with 54 Vis. / Gas: 883 BG /1200 con.)
Report Start Date 3/16/2014	Report End Date 3/17/2014	24hr Activity Summary Drilling From 7924' to 8482'
Start Time 00:00	End Time 02:00	Comment Drill 83' of 12.25" hole from 7924' to 8007' at an average ROP of 3 fph with 505 GPM, 100% Rotate Total Rotate: 83' in 2 hours  (Mud weight: 9.7 ppg with 54 Vis. / Gas: 883 BG /1200 con.)
Start Time 02:00	End Time 02:30	Comment (JSA) Lubricate Rig - Service and inspect Top Drive, Blocks, Draw Works, ST-80, Catwalk and IBOP. Teardown and inspect #1 Pump, (No repairs needed)

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	End Time	Comment
02:30	06:00	Drill 95' of 12.25" hole from 8007' to 8102' at an average ROP of 27 fph with 505 GPM, 100% Rotate Total Slide: 95' in 3.5 hours  (Mud weight: 9.7 ppg with 53 Vis. / Gas: 883 BG /1200 con.)  BJ Cement Pump truck arrived at 05:00 and began rigging up suction to mud tank gun line and discharge to lower sub Mud line. Pressure tested to 5000 PSI and Held safety Meeting with all crew members.
Start Time	End Time	Comment
06:00	07:00	(Stop)PJSM W/ Baker, Rig Crew, On rigging up baker pump truck. due to lack of gpm & rop, pumping with baker pump truck to help with flow rate & rop it is helping.
Start Time	End Time	Comment
07:00	08:00	Troubleshoot mwd, rig floor display. ( loose connection)
Start Time	End Time	Comment
08:00	17:30	(Start)Drill 12.25 vertical section F/ 8102' to 8891' (189') 19.9 fph. 40 rpm, 507 gpm, 350-550 diff.  Slide: 8102' - 8143' (41') in 3.5 hr. @ 180R GTF, 8196' - 8247' (51') 3.5 hr. @ 180R GTF.
Start Time	End Time	Comment
17:30	18:00	Rig Service.
Start Time	End Time	Comment
18:00	00:00	Drill 117' of 12.25" hole from 8291' to 8408' at an average ROP of 19.5 fph with 505 GPM, Slide From 8387' to 8408 @ 90R GTF, (21') in 2.5 Hrs Total Rotate:96' in 3.5 hours Total Slide: 21' in 2.5 hours  (Mud weight: 9.8 ppg with 50 Vis. / Gas: 800 BG /1600 con.)
Report Start Date	Report End Date	24hr Activity Summary
3/17/2014	3/18/2014	Drilling from 8408' to 8570' then circulate and Clean hole for trip, Pull out of hole and lay down BHA then Rig up casers and run 60 jts of casing to 2571'
Start Time	End Time	Comment
00:00	02:30	Drill 74' of 12.25" hole from 8408' to 8482' at an average ROP of 29.6 fph with 505 GPM, Slide From 8408' to 8415' @ 90R GTF, (7') in .75 Hrs Total Rotate:67' in 1.75 hours Total Slide: 7' in .75 hours  (Mud weight: 9.9 ppg with 46 Vis. / Gas: 1865 BG /3542 con.)
Start Time	End Time	Comment
02:30	03:00	(JSA) Lubricate Rig - Service and inspect Top Drive, Blocks, Draw Works, ST-80, Catwalk and IBOP.
Start Time	End Time	Comment
03:00	06:00	Drill 88' of 12.25" hole from 8482' to TD @ 8570 at an average ROP of 29.3 fph with 505 GPM, Slide From 8482' to 8495' @ 90R GTF, (13') in 1.5 Hrs Total Rotate:75' in 1.5 hours Total Slide: 13' in 1.5 hours  (Mud weight: 10.1 ppg with 45 Vis. / Gas: 800 BG /1360 con.)
Start Time	End Time	Comment
06:00	06:30	(Stop) Rig down baker pump truck & release.
Start Time	End Time	Comment
06:30	07:00	Rig Service.

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	07:00	End Time
	09:30	Comment
		(Start)Circulate 2X Btms up, Pump 40 bbl High vis sweeps to clean hole, Work Std. up/Down 90', Rot. 60 RPM @ 506 gpm
Start Time	09:30	End Time
	10:00	Comment
		Check Flow, Well Static, Pump Slug, Per F/ TOOH.
Start Time	10:00	End Time
	15:30	Comment
		(Start) Trip...TOOH F/ 8,570' to 1093'. SLM out of hole. Hole pulled tight @ 5,820'. work up/down through it 3 time. Check Flow @ 1093' Well Static, Pull Rotating Head Rubber.
Start Time	15:30	End Time
	17:30	Comment
		(JSA) Lay down Directional Tools.
Start Time	17:30	End Time
	18:00	Comment
		(JSA) Pick up a single joint of drill pipe and pull Wear Bushing from well head.
Start Time	18:00	End Time
	20:00	Comment
		(Start) Casing Operations... Prejob Safety Meeting with Kimzey Casing and Pioneer Rig crew. Rig up Kimzey Casing tools and prepare rig floor and catwalk for Casing run.
Start Time	20:00	End Time
	00:00	Comment
		(JSA) Run 9 5/8",N-80 40#, Buttress thread Casing. Pick up Shoe Joint with Halliburton Float shoe pre-bucked onto joint, install Centralizer then pick up second joint and thread lock connection to Halliburton Float collar also pre-bucked to joint. Installe centralizer then picked up and thread lock third joint torquing each Joint to 10,500 ft/lbs. Rig up TOG tool and Circulate through Float equipment at 5 Bpm. Continue Running 60 Joints of Casing to 2571' filling casing as needed.
Report Start Date	Report End Date	24hr Activity Summary
3/18/2014	3/19/2014	Run casing from 2751 to 8563', Circulate and rig up cementers then cement with full returns, Plug bumped, Cement to surface,Pressure test Csg to 1880 PSI, Rig down Halliburton, install pack-off, begin cleaning pits
Start Time	00:00	End Time
	11:00	Comment
		Continue Running 9 5/8" Casing F/ 2571' to 8531' filling pipe at 3000' Good returns through job while running. total joints run 201 jts 40# N-80 Buttress Float Shoe @ 8563.11 Float collar @ 8518.5
Start Time	11:00	End Time
	13:30	Comment
		Wash last stand and 1 tag joints down. Tagged bottom 43 feet in on tag joint. 3' deeper than TD(8,573'). Original TD was at 8570' Pulled off bottom with 420klbs(40klbs OSW). Lay down tag joints and perpare to pick up land joint (Pre-rig up halliburton iron and hoses)
Start Time	13:30	End Time
	14:30	Comment
		Pick up Landing joint. Adjust and install 9 5/8" casing rotating rubber. Land mandrel. Rig Down casing equipment
Start Time	14:30	End Time
	17:00	Comment
		(Start) Cementing Operations... (JSA) Circulate at 10 bpm with 450 psi and spot in then rig up Halliburton cement crew. Hold Safety Meeting with Halliburton and rig crew & install cementing head.



**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time 17:00	End Time 21:30	Comment Cement Intermediate Casing *16:56 Held Pre Job safety meeting with rig crew and cement crew Planned volumes Tuned spacer 40 bbl. at 11.3 ppg Lead #1 52 bbl. at 12.5 ppg Lead. #2 347 bbl. at 12.5 ppg Tail 126 bbl. at 14 ppg Disp: 646 bbl. at 11.6 ppg *17:18 load plug in head and line up valves / Witnessed by Drlg Foreman *17:21 pressure test pump and lines to 5100 psi and hold 5 min. *17:29 Start pumping tuned spacer at 11.3 ppg with 220 psi at 4 Bpm *17:37 39.5 bbl. tuned spacer away with red dye *17:38 Start lead#1 at 12.5 ppg with 174 psi at 4 Bpm Weigh sample and calibrate down-hole density to 12.5 ppg *17:42 Increase rate to 6 Bpm with 360 psi at 12.5 ppg *17:52 68 bbl. Lead #1 gone *17:53 Start Lead #2 at 12.5 ppg with 300 psi at 3 Bpm Catch sample weighed out to 12.5 *18:40 Continue pumping lead#2 with 270 bbl. away at 12.5 ppg with 290 psi at 6 Bpm Catch second sample) *18:52 345 bbl. lead #2 pumped Slow pump to 4 Bpm and start mixing tail at 13.9 ppg with 300 psi *18:55 Pumping tail at 14.0 ppg with 430 psi at 6 Bpm Catch and weigh first sample at 14 ppg (Good mud returns at shakers) *19:15 128 bbl. tail pumped at 14.0 ppg with 460 psi at 6 Bpm (Stop Pumping) *17:16 Swap flow to pit and wash up pump and lines *17:22 Drop plug and start pumping displacement at 8 Bpm with 630 psi Plug away (verified by Drlg Foreman) Disp:20 bbl away 420 psi at 7 Bpm Caught pressure at 400 bbl away 440 psi at 7 Bpm / Good returns 510 bbl away 600 psi at 7 Bpm / Good returns Started getting spacer coming back 550 bbl away 760 psi at 7 Bpm / Good returns Started getting clean cement back Slowed to 4 BPM 620 bbl away 630 psi at 4 Bpm 630 bbl away 650 psi at 4 Bpm *20:57 plug down at 231 bbl with FCP of 630 psi pump up to 1350 psi 40 bbls spacer back,81 bbl cement back Bleed pressure back to truck / check floats (flow back 4 bbl) *Floats held
Start Time 21:30	End Time 23:00	Comment Pressure test Casing to 1880 PSI and held pressure for 30 Minutes, Rig down Cement crew while rig crew flushed BOPE and flow line with clean water. (130 bbls of Neutralized Cement interface and slop water hauled to disposal)

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	23:00	End Time
		00:00
Comment (Start) NU Well head equipment / Clean pits with 4C reclamation Hold PreJob Safety Meeting with Cameron and rig Crew, lay down landing Joint and Pick up 1 Jt drill pipe and run pack-off assembly and make up to fluted mandrel and set hanger in well head.		
Report Start Date	Report End Date	24hr Activity Summary
3/19/2014	3/20/2014	Complete running pack-off and test, PU Curve Ass. TIH to 8512' Drlg CMT/ FC/FS 10' New Hole Fit Test 15.5 EMW, Drill Curve from 8,593' to 8,630'
Start Time	00:00	End Time
		01:30
Comment Continue to NU Well head equipment, Tighten Down Pack-off then pressure test pack-off to 2400 PSI and held for 15 minutes (Tested Good) Screw out of pack-off and pull joint from BOP, break off running tool and lay down Joint. Continue to Clean Mud Tanks with 2- 4C Reclamation Super vac Trucks		
Start Time	01:30	End Time
		02:30
Comment (Start)Handle Curve Assembly... Handle BHA/ Install Wear Bushing and tighten 4 Pins on well head. Continue to Clean Mud tanks with 4C		
Start Time	02:30	End Time
		03:00
Comment (JSA) Lubricate Rig - Service and inspect Top Drive, Blocks, Draw Works, ST-80, Catwalk and IBOP.		
Start Time	03:00	End Time
		08:30
Comment Pick up BHA - Pick up Bit(MDI 611) and Motor (7/8 lobe, 5.0 Stage .28 RPG, 2.5 deg FB) Make up bit and motor then run in and Pick up Mule shoe and top tool carrier, make up Flex collar, and work on MWD tools and reprogram. Continue to Clean Mud tanks with 4C		
Start Time	08:30	End Time
		12:00
Comment (Start) Trip...TIH W/ 9 stands DP & 8 Stands HWDP install jars & 2 more stands hwdp & change out rotating head rubber & install. Fill pipe test mwd tool @ 2000' @ 65spm on # 1 pump, recycled pump 3 times. Continue to Clean Mud tanks with 4C		
Start Time	12:00	End Time
		16:00
Comment Continue TIH F/ 2000' To 8155' Filling every 2000'.		
Start Time	16:00	End Time
		17:30
Comment Cut & Slip 112' Drilling line		
Start Time	17:30	End Time
		18:00
Comment Rig Service		
Start Time	18:00	End Time
		18:30
Comment Trip in to 8512' - tagged Cement,		
Start Time	18:30	End Time
		20:30
Comment (Start) Drill shoe track/FIT...Drill Shoe track FC from 8518' to top of float shoe at 8563'. Drill out parameters: 15-20 WOB, 96 spm (400gpm), 20 RPM. Drill 10' foot of new formation from 8570' to 8580'.		
Start Time	20:30	End Time
		21:30
Comment Circulate & condition hole & Mud for FIT Test (Spot Sweep on BTM)		
Start Time	21:30	End Time
		22:30
Comment HPJSM with Pioneer, NFX, and Eager beaver. Perform FIT test. Target 16 ppg EMW. 1750 psi w/12 ppg mw held for 5 minutes. EMW 15.5 ppg (Pumped 190 gals)		
Start Time	22:30	End Time
		00:00
Comment (Start)Drill Curve... Drill Slide 8-3/4" Curve from 8,580' to 8,630' (40') 26.6 fph. WOB 15-25, TQ 9-12 k, 150-350 Diff, PP 3050 psi 400 gpm Mtr RPM 112 Slide 8,593' to 8,623' (29') 90 R		

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

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**Daily Operations**

Report Start Date	Report End Date	24hr Activity Summary
3/20/2014	3/21/2014	Drill Curve from 8,630' to 9,010', Circ. TOOH, PU New Bit/3* Motor, Trip in hole Drill Curve from 9,010' to 9,043'
Start Time	End Time	Comment
00:00	04:30	Drill Slide 8-3/4" Curve from 8,630' to 8,822' (192') 42.6 fph. WOB 15-25, TQ 9-12 k, 150-350 Diff, PP 3050 psi 500 gpm Mtr RPM 145 Slide 8,630' to 8,633' (3') GTF 90 R Slide 8,633' to 8,664' (31') GTF 50 R Slide 8,664' to 8,688' (24') GTF HSR Drill 8,688' to 8,696' (8') Slide 8,696' to 8,727' (31') GTF HSR Slide 8,727' to 8,759' (31') GTF HSR Slide 8,759' to 8,787' (28') GTF HSR Drill 8,787' to 8,791' (4') Slide 8,791' to 8,822' (31') GTF HS
Start Time	End Time	Comment
04:30	05:00	Rig Service
Start Time	End Time	Comment
05:00	08:30	Drill Slide 8-3/4" Curve from 8,822' to 9,010' (188') 53.7 fph. WOB 15-25, TQ 9-12 k, 150-350 Diff, PP 3050 psi 500 gpm Mtr RPM 145 Slide 8,822' to 9,010' (188') GTF HS
Start Time	End Time	Comment
08:30	10:00	(Stop) Unplanned POOH F/lack of biuld rates... Criculating working pipe up/down while biulding slug, Check Flow, Well Static, Pump Slug.
Start Time	End Time	Comment
10:00	15:00	(Start) Trip... POOH F/ lack on biuld rates F/ 8914' to 1938'. pull rotating rubber @ 1938' & cont. pooh F/ 1938' to 92'. LD Bit & Motor
Start Time	End Time	Comment
15:00	17:30	PU New Bit & motor Scrib, Trip in hole from 92' to 946' (Motor: Weatherford Hypline 7850 3* 7/8 Lobe, 6.55 Bit to Bend, TFA .86)
Start Time	End Time	Comment
17:30	18:00	Rig Service
Start Time	End Time	Comment
18:00	23:00	Trip in Hole from 946' to 9010 (Install head rubber & test MWD1350', Fill every 3000')
Start Time	End Time	Comment
23:00	00:00	(Start)Drill Curve... Drill Slide 8-3/4" Curve from 9,010' to 9,043' (33') 33 fph. WOB 15-25, 150-375 Diff, PP 3250 psi 500 gpm Mtr RPM 145  Slide 9,010' to 9,043' (33') GTF HS
Report Start Date	Report End Date	24hr Activity Summary
3/21/2014	3/22/2014	Drill Curve from 9,043 to 9,265' Circ. Trip out of Hole, LD Curve BHA, PU Lateral Tools TIH to 9265'

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time 00:00	End Time 05:30	Comment Drill Slide 8-3/4" Curve from 9,043' to 9,233' (190') 34.5 fph. WOB 15-25, 150-375 Diff, PP 3250 psi 500 gpm Mtr RPM 145  Slide 9,043' to 9,075' (32') GTF HSL Slide 9,075' to 9,105' (30') GTF HSL Slide 9,105' to 9,138' (33') GTF 20L Slide 9,138' to 9,170' (32') GTF 45L Slide 9,170' to 9,200' (30') GTF 30L Slide 9,200' to 9,233' (33') GTF 30L
Start Time 05:30	End Time 06:00	Comment Rig Service
Start Time 06:00	End Time 07:00	Comment Drill Slide 8-3/4" Curve from 9,233' to 9,265' (32') 32 fph. WOB 15-25, 150-375 Diff, PP 3250 psi 500 gpm Mtr RPM 145
Start Time 07:00	End Time 09:30	Comment (Start) Circulate... Circ. 2X bottoms up work pipe up/down W/ 1 pump @ 120 spm @ 500 gpm. Check Flow, Well Static, Pump Slug, Perpare to POOH.
Start Time 09:30	End Time 12:00	Comment (Start) Trip... POOH To change out BAH to finish curve. F/ 9265' to 4200'. No drag in curve.
Start Time 12:00	End Time 12:30	Comment Rig Service.
Start Time 12:30	End Time 15:00	Comment Cont. pooh f/ 4200' to 92'
Start Time 15:00	End Time 16:30	Comment JSA, LD BHA, wash & clean tools before Laying down, Lay Down Flex NMDC, Pull MWD tool out of carrier, Break carrier and Mule shoe off Motor, Drain & Break Bit off Motor.
Start Time 16:30	End Time 17:00	Comment CLean Rig Floor
Start Time 17:00	End Time 19:00	Comment (Start) PU Lateral Assembly... PU New Bit & Adjustable Motor 1.83 Degree, Make up to motor, PU 2 Pony Subs, MU NM Pony Sub to Motor, Make up 2nd Pony Sub to pony HEL tool/make up HEL tool to top of pony sub / Scribe tools
Start Time 19:00	End Time 00:00	Comment (Start)Trip... Trip in hole from 93' to 2085' Install Head Rubber / Test tool Trip in hole from 2085' to 9235' , Wash 30' to Btm. Fill Pipe every 300'
Report Start Date 3/22/2014	Report End Date 3/23/2014	24hr Activity Summary Wash to Btm. Drill Lateral from 9,265 to 10,022' (757') Circ/Cond, TOO H from 9,835' to 9'265'
Start Time 00:00	End Time 00:30	Comment Wash down from 9,235' to 9,265'
Start Time 00:30	End Time 05:30	Comment (Start) Drilling...Drill Slide 8-3/4" Lateral from 9,265' to 9,410' (145) 29 fph. WOB 15-25, 150-375 Diff, PP 3450 psi 500 gpm Mtr RPM 145  Slide 9,265' to 9,297' (32') GTF 80L Slide 9,297' to 9,329' (32') GTF 90L Slide 9,375' to 9,410' (35') GTF 180L
Start Time 05:30	End Time 06:00	Comment Rig Service.



**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	06:00	End Time
		16:00
		Comment
		Drill Slide 8-3/4" Lateral F/ 9,410' to 9,835' (425') 44.7 fph. WOB 15-25, 150-375 Diff, PP 3450 psi 500 gpm Mtr RPM 145.
		Slide: 9,410' - 9,413' (3') @ 180L GTF.
		Slide: 9,719' - 9,735' (16') @ 60R GTF.
		Slide: 9,803' - 9,827' (25') @ 45R GTF.
Start Time	16:00	End Time
		16:30
		Comment
		Rig Service.
Start Time	16:30	End Time
		21:30
		Comment
		Drill Slide 8-3/4" Lateral F/ 9,835' to 10,022' (187') 37.4 fph. WOB 15-25, 150-375 Diff, PP 3450 psi 500 gpm Mtr RPM 145.
		Slide: 9,898' to 9,913' (15') GTF 0 R
Start Time	21:30	End Time
		23:30
		Comment
		(Start) Circulating for Reamer Run... & Condition @ 550 gpm, 140 stks, PP 3780 psi, 100 RPM, working 2 -stds. out @ 1- Btms. up per/Std.
Start Time	23:30	End Time
		00:00
		Comment
		(Start) Trip for Reamer Run... Flow Ck. Start Trip out of hole from 9,835' to 9,265'
Report Start Date	Report End Date	24hr Activity Summary
3/23/2014	3/24/2014	TOOH from 9,265' to 92', LD Dir Tools, PU Curve Reaming Assembly, TIH to 8583', Started Reaming Curve, Hit Tight area @ 9211' stuck Pipe, Work Stack pipe, RU Wireline run Freepoint.
Start Time	00:00	End Time
		00:30
		Comment
		Cont.Trip out of hole from 9265' to 8337'
Start Time	00:30	End Time
		01:00
		Comment
		Flow Check, Pump Slug,
Start Time	01:00	End Time
		04:00
		Comment
		Trip out of hole from 8337' to 93'
Start Time	04:00	End Time
		04:30
		Comment
		Pull Head Rubber
Start Time	04:30	End Time
		05:30
		Comment
		LD NMDC, HEL, Motor & Bit
Start Time	05:30	End Time
		06:00
		Comment
		Rig Service.
Start Time	06:00	End Time
		08:00
		Comment
		(Start) P/U Reamer Assembly... P/U 10 piece reamer assembly & float sub.
Start Time	08:00	End Time
		12:00
		Comment
		(Start) Trip in hole.... TIH F/ 94' - 8583' filling pipe every 3000'.
Start Time	12:00	End Time
		16:30
		Comment
		(Start) Reaming Curve section... Ream F/ 8583' to 9211' @ 100 RPM, 135 SPM, 525 GPM, 1000' PH. hit tight spot @ 9211' work thru to 9216'
Start Time	16:30	End Time
		17:30
		Comment
		(Stop) Fishing...Drill string Stuck @ 9211', Work Stuck Pipe, working torque down up to 37K work pipe 100k over stringweight - String has not moved Pump 525 gpm, PP 3825 psi full returns. work stuck pipe w/ no movement
Start Time	17:30	End Time
		18:00
		Comment
		Rig Service
Start Time	18:00	End Time
		23:00
		Comment
		Drill string Stuck @ 9211', Work Stuck Pipe, working torque down / up to 37K work pipe 100k over stringweight - String has not moved, Pump 525 gpm, PP 3825 psi full returns Spot diesel/OBM mix 40 bbl pill from 9216' to 8561' for 20 min. work stuck pipe, No movement

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	23:00	End Time
	23:30	Comment
Start Time	23:30	End Time
	00:00	Comment
Report Start Date	Report End Date	24hr Activity Summary
3/24/2014	3/25/2014	Ran Freepoint, pipe free to top of reamer @ 9,134' Ran shot backed off @ 8498', TOH, PU Fishing Tools, Trip in hole to 8106', Cut Drl. Line, TIH Latch hold of Fish, Jar Free, Back Ream out to 9100'
Start Time	00:00	End Time
	01:30	Comment
Start Time	01:30	End Time
	03:30	Comment
Start Time	03:30	End Time
	05:30	Comment
Start Time	05:30	End Time
	06:00	Comment
Start Time	06:00	End Time
	07:00	Comment
Start Time	07:00	End Time
	11:00	Comment
Start Time	11:00	End Time
	13:00	Comment
Start Time	13:00	End Time
	16:30	Comment
Start Time	16:30	End Time
	17:30	Comment
Start Time	17:30	End Time
	18:00	Comment
Start Time	18:00	End Time
	18:30	Comment
Start Time	19:30	End Time
	22:00	Comment
Start Time	22:00	End Time
	00:00	Comment
Report Start Date	Report End Date	24hr Activity Summary
3/25/2014	3/26/2014	Ream f/ 9,620' to 10,022', Circulate & Condition for Trip, Trip out of hole, LD Fishing tools, Tooh, LD Reaming Assembly, PU Rotary Sterable tools, TIH to 1500', Test Tools, Picking Up 60 JTs. DP. to 2,742'
Start Time	00:00	End Time
	00:30	Comment
Start Time	00:30	End Time
	09:00	Comment
Start Time	09:00	End Time
	10:30	Comment

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	10:30	End Time
		15:00
Comment (Start) Tripping... POOH F/ 10015' to 3000' Max over pull 35K over string weight in cruve, while monitering well on trip tank.		
Start Time	15:00	End Time
		15:30
Comment Pull Head Rubber		
Start Time	15:30	End Time
		18:30
Comment Lay Down Fishing Assembly, Lay Down Shot Jt., Rack back 6 Stds. of DP, LD 1 jt. Lay down Reamer Assembly.		
Start Time	18:30	End Time
		19:00
Comment Rig Service		
Start Time	19:00	End Time
		21:00
Comment (Start)P/U Lateral Assembly... PU & MU R.S.S. Assembly, Program tool, Pu Motor & MWD (Motor: 7/8, 3.0 Stage, Rev/Gal 0.15, Flow 300-600 gpm, 0.0 Adj.)		
Start Time	21:00	End Time
		21:30
Comment (Srt) Trip... Trip In hole from 123' to 500'		
Start Time	21:30	End Time
		22:00
Comment Install Head Rubber		
Start Time	22:00	End Time
		22:30
Comment Trip in Hole from 500' to 1,546'		
Start Time	22:30	End Time
		23:00
Comment Shallow Test MWD Tools		
Start Time	23:00	End Time
		00:00
Comment Trip, PU 60 Jts of Push pipe of rack & run in hole From 1,546' to 2,742'		
Report Start Date	Report End Date	24hr Activity Summary
3/26/2014	3/27/2014	Trip in hole W/ Rotary Steerable f/ 2,742' to 8664' Deflec tool, TIH to 10,010', Wash 12' to Btm. of 10,022', Rotary Drill 8.5" Lateral f/10,022' to 11,094' (1072') @ 65 fph
Start Time	00:00	End Time
		01:00
Comment Cont. PU 60 Jts. of push pipe off pipe rackF/ 2,742' to 3,578'		
Start Time	01:00	End Time
		03:30
Comment Trip in hole from 3,578' to 8,555' (Fill every 3000')		
Start Time	03:30	End Time
		04:00
Comment Change out Rotating head rubber		
Start Time	04:00	End Time
		04:30
Comment Trip in from 8,555' to 8647' (Fill every 3000')		
Start Time	04:30	End Time
		05:00
Comment Circulate @ 550 gpm Test & Deflec tool		
Start Time	05:00	End Time
		07:00
Comment Trip in hole thru Curve from 8,647' to 10,010' setting autopilot on R.S.S. Reamed 12' fill F/ 10,010 to 10,025' Total Fill 12'. ( No tight spots)		
Start Time	07:00	End Time
		17:30
Comment (Start) Drilling... Drill 8 1/2" lateral F/ 10,022' to 10,735' (713') @ 67.9' fph WOB 20-25, Diff 250-450, PP 4000 psi, 540 gpm, MTR RPM		
Start Time	17:30	End Time
		18:00
Comment Rig Service		
Start Time	18:00	End Time
		00:00
Comment Drill 8 1/2" lateral F/ 10,735' to 11,094' (359') @ 59' fph WOB 20-25, Diff 250-450, PP 4000 psi, 540 gpm, MTR RPM		
Report Start Date	Report End Date	24hr Activity Summary
3/27/2014	3/28/2014	Rotary Drill 8.5" Lateral f/11,094' to 12,277' (1183') @ 51.9 fph
Start Time	00:00	End Time
		05:30
Comment Drill 8 1/2" lateral F/ 11,094' to 11,300' (206') @ 37.5' fph WOB 20-25, Diff 250-450, PP 4000 psi, 540 gpm, MTR RPM		

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	05:30	End Time
	06:00	Comment
Start Time	06:00	End Time
	08:30	Comment
		Drill 8 1/2" lateral F/ 11,300 to 11,422' (122') @ 48.8' fph
		WOB 20-25, Diff 250-450, PP 3850 psi, 440 gpm, MTR RPM
Start Time	08:30	End Time
	09:00	Comment
Start Time	09:00	End Time
	00:00	Comment
		Drill 8 1/2" lateral F/ 11,422' to 12,277' (855') @ 57 fph
		WOB 20-25, Diff 250-450, PP 4260 psi, 470 gpm, MTR RPM
Report Start Date	Report End Date	24hr Activity Summary
3/28/2014	3/29/2014	Rotary Drill 8.5" Lateral f/12,277' to 13,520' (1243') @ 65.4 fph, Circulate & Condition Hole for Trip. (MWD Tools)
Start Time	00:00	End Time
	00:30	Comment
Start Time	00:30	End Time
	17:00	Comment
		Drill 8 1/2" lateral F/ 12,277' to 13,372' (1095') @ 66.4 fph
		WOB 20-25, Diff 250-450, PP 4260 psi, 440 gpm, MTR 66 RPM
Start Time	17:00	End Time
	17:30	Comment
Start Time	17:30	End Time
	20:00	Comment
		Drill 8 1/2" lateral F/ 13,372' to 13,520' (148') @ 59 fph
		WOB 20-25, Diff 250-450, PP 4360 psi, 440 gpm, MTR 66 RPM
Start Time	20:00	End Time
	00:00	Comment
		(Stop Uplanned) POOH F/ RSS Failure .... Circulating & Condition Hole for Trip, Circ. 4 Btms up, Pull 1 Std. every Btms up.Start @ 13,520 to 13,179' , 120 spm, 440 gpm, 100 rpm
Report Start Date	Report End Date	24hr Activity Summary
3/29/2014	3/30/2014	Circulate, Flow Ck. Pump Slug, Trip out of Hole f/ 13,520' to 93', LD Dir Tools Bit & Motor, PU new MWD/RSS/HEL Tools & Bit, TIH to 4,355', Top Drive hung due to guide pads, Repair Guide & Pads.
Start Time	00:00	End Time
	01:30	Comment
		Cont. Circulating & Condition Hole for Trip, Circ. 4 Btms up, Pull 1 Std. every Btms up.Start @ 13,520 to 13,179' , 120 spm, 440 gpm, 100 rpm
Start Time	01:30	End Time
	02:00	Comment
Start Time	02:00	End Time
	05:30	Comment
		(Start)Trip... Trip out of hole F/ 13,520' to 8,600' (Flow Check @ 9 5/8 Casing Shoe No Flow)
Start Time	05:30	End Time
	06:00	Comment
Start Time	06:00	End Time
	11:00	Comment
		TOOH from 8600' to BHA, Lay down BHA, NMDC, and brake bit, Lay down MM, Lay down reamers on rig floor, and lay down RSS tools.
Start Time	11:00	End Time
	14:00	Comment
		P/U Lateral Assembly... PU & MU R.S.S. Assembly, Program tool.
Start Time	14:00	End Time
	14:30	Comment
Start Time	14:30	End Time
	16:00	Comment
		Trip in Hole F/ 96' to 1516' Shallow Test MWD Tools ( Install Rotating Rubber)
Start Time	16:00	End Time
	17:30	Comment
		Cont.TIH F/ 1516' to 4355' Filling pipe every 3000'



**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time		End Time		Comment	
17:30		00:00		(Stop Unplannd)Repair Top Drive, - Track/ Guide after filling pipe, went to come up tp latch a stand, Top Drive hung up on track and pad retainer block flee to floor, inspect Top Drive track for damage. Repair Blocks & install new pads.	
Report Start Date	Report End Date	24hr Activity Summary			
3/30/2014	3/31/2014	Repair Repair, TIH f/ 4,355' to 8,526' Cut Drl line, C/O Head Rubber/Trip in f/ 9300' to 13,520' Drill f/ 13,520' to 14,375' (855') 61 fph			
Start Time		End Time		Comment	
00:00		01:00		Repair Top Drive, - Track/ Guide after filling pipe, went to come up tp latch a stand, Top Drive hung up on track and pad retainer block flee to floor, inspect Top Drive track for damage. Repair Blocks & install new pads.	
Start Time		End Time		Comment	
01:00		03:00		(Start)TIH...Trip in Hole f/ 4,355' to 8,527' (Shoe)	
Start Time		End Time		Comment	
03:00		04:00		(Start) Cut & Slip Drilling Line	
Start Time		End Time		Comment	
04:00		04:30		Rig Service	
Start Time		End Time		Comment	
04:30		05:00		Change out /Head Rubber	
Start Time		End Time		Comment	
05:00		08:00		Trip in Hole f/ 8527' to 13440' Filling pipe Every 3000'.	
Start Time		End Time		Comment	
08:00		09:30		Program RSS Tools & Circ. @ 485 gpm 150rpm.	
Start Time		End Time		Comment	
09:30		17:30		(Start) Drilling... Drill 8 1/2" lateral F/ 13,520' to 14,007' (487') @ 61 fph WOB 20-25, Diff 250-450, PP 4320 psi, 520 gpm, 150 RPM	
Start Time		End Time		Comment	
17:30		18:00		Rig Service	
Start Time		End Time		Comment	
18:00		00:00		Drill 8 1/2" lateral F/ 14,007' to 14,375' (368') @ 61.4 fph WOB 20-25, Diff 250-450, PP 4320 psi, 500 gpm, 150 RPM	
Report Start Date	Report End Date	24hr Activity Summary			
3/31/2014	4/1/2014	Drill f/ 14,375' to 15,963' (1588') 63 fph			
Start Time		End Time		Comment	
00:00		00:30		Rig Service (Inspect Guide Pads)	
Start Time		End Time		Comment	
00:30		17:00		Drill 8 1/2" lateral F/ 14,375' to 15,526' (1151') @ 69 fph WOB 20-25, Diff 250-450, PP 4320 psi, 480 gpm, 150 RPM	
Start Time		End Time		Comment	
17:00		17:30		Rig Service	
Start Time		End Time		Comment	
17:30		00:00		Drill 8 1/2" lateral F/ 15,526' to 15,963' (437') @ 67 fph WOB 20-25, Diff 250-450, PP 4320 psi, 480 gpm, 150 RPM	
Report Start Date	Report End Date	24hr Activity Summary			
4/1/2014	4/2/2014	Drill f/ 15,963' to 16,363' at 63 fph. Unhook # 3 pump and rig up #2. Drill 8 1/2" lateral from 16,363' to 16,568'. Trouble shoot MWD. Drill 8 1/2" lateral from 16,568' to 16,883' (920') 48.5 fph			
Start Time		End Time		Comment	
00:00		05:30		Drill 8-1/2" Lateral from 15,963' - 16,316' (353') at 64.2 fph.	
Start Time		End Time		Comment	
05:30		06:00		Rig service.	
Start Time		End Time		Comment	
06:00		08:00		Drill 8-1/2" Lateral from 16,316' - 16,363' (47') at 23.5 fph. WOB 20-25, PP psi, 480 gpm, 150 RPM	

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	08:00	End Time
	09:30	Comment (Stop) Unplanned-Rig repair pumps. Rig down pump #3 and rig up pump #2. Circulate and work pipe while swapping pumps.
Start Time	09:30	End Time
	10:00	Comment (Start) Drill 8-1/2" Lateral from 16,363' - 16,391' (28') at 56 fph. WOB 20-30, PP 3700 psi, 420 gpm, 150 RPM
Start Time	10:00	End Time
	12:00	Comment (Stop) Unplanned- MWD detection issues. With both pumps on the hole MWD began to have detection issues. Began trouble shooting. Had no detection issues when running pumps separately. Continue trouble shooting.
Start Time	12:00	End Time
	17:00	Comment (Start) Drill 8-1/2" Lateral from 16,363' - 16,568' (205') at 41fph . WOB 20-30, PP 4700 psi, 506 gpm, 150 RPM
Start Time	17:00	End Time
	17:30	Comment Rig Service.
Start Time	17:30	End Time
	00:00	Comment Drill 8-1/2" Lateral from 16,568' - 16,883' (315') at 48.5 fph . WOB 20-30, PP 4700 psi, 506 gpm, 150 RPM
Report Start Date	Report End Date	24hr Activity Summary
4/2/2014	4/3/2014	Drill f/ 16,883' to 17,462' (579') 56.3 fph. Circulate and trouble shoot high pressure and low ROP. Continue Drilling from 17,462' to 18,086' (624') 56.7 fph.
Start Time	00:00	End Time
	05:30	Comment Drill 8-1/2" Lateral from 16,883' to 17,242' (322') 65.2 fph WOB 20-30, PP 4700 psi, 491 gpm, 150 RPM
Start Time	05:30	End Time
	06:00	Comment Rig Service
Start Time	06:00	End Time
	07:30	Comment Drill 8-1/2" Lateral from 17,242' to 17,327' (85') at 56.6 fph. WOB 20-30, PP 4800 psi, 481 gpm, 150 RPM
Start Time	07:30	End Time
	08:00	Comment Rig service. Went through pump #1. Changed seats and valves
Start Time	08:00	End Time
	10:00	Comment Drill 8-1/2" Lateral from 17,327' - 17,446' (119') at 59.5 fph . WOB 20-30, PP 4800 psi, 481 gpm, 150 RPM
Start Time	10:00	End Time
	10:30	Comment Due to pressure increase picked up. Circulate and work pipe at 150rpm and at 134spm (470gpm).
Start Time	10:30	End Time
	11:00	Comment Drill 8-1/2" Lateral from 17,446' - 17,462' (16') at 32 fph . WOB 20-30, PP 4800 psi, 481 gpm, 150 RPM
Start Time	11:00	End Time
	12:30	Comment Due to pressure increase and low rate of penetration picked up. Circulate and work pipe at 150rpm and at 137spm (480gpm).
Start Time	12:30	End Time
	13:30	Comment Drill 8-1/2" Lateral from 17,462' - 17,489' (27') at 32 fph . WOB 20-30, PP 4900 psi, 471 gpm, 150 RPM
Start Time	13:30	End Time
	14:00	Comment Downlink tool. Work pipe up and down once.
Start Time	14:00	End Time
	00:00	Comment Drill 8-1/2" Lateral from 17,489' - 18,086' (597') at 59.7 fph . WOB 25-35, PP 4600-4800 psi, 471 gpm, 160 RPM
Report Start Date	Report End Date	24hr Activity Summary
4/3/2014	4/4/2014	Drill f/ 18086 to 19221' (1135') Rig repair top Drive (Wash pipe packing).

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	00:00	End Time
		05:30
Comment		
Drill 8-1/2" Lateral from 18,086' - 18,464' (378') at 68.7 fph .		
WOB 25-35, PP 4600-4800 psi, 471 gpm, 160 RPM		
Start Time	05:30	End Time
		06:00
Comment		
Service rig		
Start Time	06:00	End Time
		13:30
Comment		
Drill 8-1/2" Lateral from 18,464' - 18,843' (379') at 50.5 fph .		
WOB 25-35, PP 4900 psi, 471 gpm, 160 RPM		
Start Time	13:30	End Time
		14:00
Comment		
Rig Service		
Start Time	14:00	End Time
		22:30
Comment		
Drill 8-1/2" Lateral from 18,843' - 19,221' (378') at 50.4 fph .		
WOB 25-35, PP 4900 psi, 468 gpm, 160 RPM		
While making connection at 19221 the wash pipe packing nut on the Top Drive backed off.		
Start Time	22:30	End Time
		00:00
Comment		
(Stop) Unplanned Rig Repair - Top Drive (JSA & Personnel Lift Permit) Repair Wash Pipe Packing on Top Drive.		
Report Start Date	Report End Date	24hr Activity Summary
4/4/2014	4/5/2014	Drill from 19,221' to 19,523' (302'). Begin Clean up cycle Pumped 7+ bottoms up hole cleaning up good
Start Time	00:00	End Time
		05:30
Comment		
(Start) Drill 8-1/2" Lateral from 19,221' - 19,413' (192') at 34.9 fph .		
WOB 25-35, PP 4900 psi, 471 gpm, 160 RPM		
Start Time	05:30	End Time
		06:00
Comment		
Rig Service		
Start Time	06:00	End Time
		11:00
Comment		
Drill 8-1/2" Lateral from 19,413' - 19,523'(110') at 22 fph .		
WOB 25-35, PP 4900 psi, 468 gpm, 160 RPM		
Start Time	11:00	End Time
		00:00
Comment		
(Start) Final clean up cycle. Circulate 10 bottoms up (12,000strokes per bottoms up) at 132spm(464gpm), 160rpm, and working a full stand. Rack one stand back upon completion of one bottoms up.		
Parameters at beginning of Clean up:		
Torque- 15 Kft-lbs		
Rotating PU- 201.5 klbs		
Rotating SO- 191 klbs		
Pump Pressure- 4900 psi		
1st bottoms up-Shakers had good coverage with coffee ground size cuttings.		
2nd bottoms up- 50% coverage with ultra-fine cuttings.		
3rd BU- 50-60% coverage with ultra-fine cuttings		
4th BU- ~50% Coverage with ultra-fine cuttings		
5th BU- 50% coverage on shale shakers with 70% fines and 30% Small (1/32") cuttings		
6th BU- 30% Coverage on Shakers with 80% and 20% Small (1/32") cuttings		
7th BU - 40 to 60% coverage on shakers 100% Ultra fines		
89,000/120,000strokes completed @ 00:00.		
Parameters @ 00:00		
Torque- Kft-lbs		
Rotating PU- 201 klbs		
Rotating SO- 190 klbs		
Pump Pressure- 4700 psi		

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

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**Daily Operations**

Report Start Date	Report End Date	24hr Activity Summary
4/5/2014	4/6/2014	Finish Clean up cycle. Spot lubra beads for trip. Backream out of hole from 19,523' to 13350'.then pull out of hole on elevators to 12400
Start Time	End Time	Comment
00:00	02:30	Circulate 12 bottoms up (12,000strokes per bottoms up) at 132spm(464gpm), 160rpm, and working a full stand. Rack one stand back upon completion of one bottoms up.  8th & 9th BU- 30% of ultra fines
Start Time	End Time	Comment
02:30	04:00	Wash and rotate back to bottom with 136spm(480gpm) and 160rpms.
Start Time	End Time	Comment
04:00	08:00	Finish Circulating 12 bottoms up (12,000strokes per bottoms up) at 137spm(480gpm), 160rpm, and working a full stand.  10th BU- 25% coverage of ultra fines. 11th BU- 25% coverage of ultra fines 12th BU- 15-25% coverage of ultra fines and some coarse cuttings.  Parameters @ End of clean up Torque- 15Kft-lbs Rotating PU- 209 klbs Rotating SO- 189 klbs Pump Pressure- 4800 psi  Shut pumps and rotary off. Tried to pick up and weight increased to 385 klbs.
Start Time	End Time	Comment
08:00	09:00	Mix lubra beads directly into suction pit. Spot lubra beads throughout lateral.
Start Time	End Time	Comment
09:00	17:30	(Start) Trip. Try to pull with lubra beads spotted in lateral. Pull to 355klbs with no breakover. Begin backreaming from 19,523' - 15,431'. Try to pull on elevators at 18,582' and 17,625' with no success. Pulled to 350 klbs. Pulled through tight spot at 17,570. Check for free pull up to 350K on elevators every 10 stands.
Start Time	End Time	Comment
17:30	18:00	(JSA & Personel lift permit) Lubricate rig and Top Drive system.
Start Time	End Time	Comment
18:00	22:30	Trip - Continue to back Ream from 15431' to 13350 checking every 5 stands for free pull on elevators up to 350K. Pulled free with 350 K at 13350'.
Start Time	End Time	Comment
22:30	00:00	Trip - Pull out of hole on Elevators from 13350' to 12400 (Wet Pipe) Check well for flow and Pump Slug to dry pipe. (JSA) Using Rig Tongs to break out tight connections. Keep Hole full with trip tank, ensure proper fill up every 5 stands with trip sheet.
Report Start Date	Report End Date	24hr Activity Summary
4/6/2014	4/7/2014	TOOH to casing Shoe, Cut & Slip DL then Pull out of hole. Pick up Bull Nose hole opener and bit sub then trip in hole to 16370 stack out oan begin wash and ream
Start Time	End Time	Comment
00:00	03:00	TOOH from 12,400' to 8,400'. Monitor well on trip tank. Well took proper fill.



**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	03:00	End Time
	04:00	Comment
Start Time	04:00	End Time
	04:30	Comment
Start Time	04:30	End Time
	11:00	Comment
Start Time	11:00	End Time
	12:30	Comment
Start Time	12:30	End Time
	13:00	Comment
Start Time	13:00	End Time
	15:30	Comment
Start Time	15:30	End Time
	16:00	Comment
Start Time	16:00	End Time
	23:30	Comment
Start Time	23:30	End Time
	00:00	Comment
Report Start Date	Report End Date	24hr Activity Summary
4/7/2014	4/8/2014	Wash and ream to bottom, Pump cleanup cicle 3 x bottoms up, Back ream out of hole from 19523 to 16370 then pull out to 8481 on elevators and stop to cut& slip DL
Start Time	00:00	End Time
	05:30	Comment
Start Time	05:30	End Time
	06:00	Comment
Start Time	06:00	End Time
	07:30	Comment
Start Time	07:30	End Time
	12:00	Comment
Start Time	12:00	End Time
	17:30	Comment
Start Time	17:30	End Time
	18:00	Comment
Start Time	18:00	End Time
	23:30	Comment
Start Time	23:30	End Time
	00:00	Comment
Report Start Date	Report End Date	24hr Activity Summary
4/8/2014	4/9/2014	Cut & Slip DL, Pull out of hole, Pull Wear bushing, Rig up casing crew, run 5.5" csg from surface to 9223'
Start Time	00:00	End Time
	00:30	Comment
Start Time	00:30	End Time
	01:00	Comment

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	01:00	End Time 07:00
		Comment Trip. TOOH from 8,485' to 670'. Pull rotating rubber. Lay down Bull nose hole opener. Pull Wear bushing.
Start Time	07:00	End Time 07:30
		Comment Rig Service
Start Time	07:30	End Time 10:30
		Comment (Start) Casing Operations- Hold PJSM with Pioneer, NFX, and Kimzey on rigging up. Rig up Kimzey casing crews. Spot in power unit. Pick up flush mounted slips, elevators, bales, power tongs, and misc equipment.
Start Time	10:30	End Time 11:00
		Comment Hold PJSM with Pioneer, NFX, and Kimzey on running casing.
Start Time	11:00	End Time 00:00
		Comment Run 5.5" BTC XP, P-110, 20# casing from surface to 9223' (220 total joints run). Filled casing at 2508, 6222, 8542 ( Break circ)
Report Start Date	Report End Date	24hr Activity Summary
4/9/2014	4/10/2014	Run casing from 9223' to 19,508'. Land casing out. Rig down Kimzey. Install RCH. Circulate while Rigging up HES cementers. HPJSM with cementers. Pump cement job.
Start Time	00:00	End Time 00:30
		Comment Lubricate rig
Start Time	00:30	End Time 14:00
		Comment Run 5.5" BTC XP, P-110, 20# casing from 9223' to 19,508' (467 total joints run). Filled casing every 2500' or as needed for weight (Break circulation). Wash through one spot at 19,428'. Orient Mandrel hanger and land casing.
Start Time	14:00	End Time 15:00
		Comment Rig down kimzey casing's elevators, Bales, and slips. Install rig bales and elevators. Pick up GSI rotating cement head. Make up RCH with kimzey power tongs. Rig down slips and power tongs. Begin rigging up Halliburton cementers.
Start Time	15:00	End Time 19:00
		Comment Pull mandrel hanger 8 inches above bowl. Circulate casing with 96spm (337gpm) and 15rpms with 12-13 Kft-lbs. Halliburton cementers spotting in and rigging up.
Start Time	19:00	End Time 19:30
		Comment (Start) Cementing operations. Hold Pre-Job Safety meeting with HES, Pioneer, and NFX.
Start Time	19:30	End Time 00:00
		Comment Rig up HES hardlines to RCH.
		Pump cement as follows.
		1.) Pump 10 bbls fresh water through backside iron to test in-line equipment
		2.) Pressure test cement lines to 6,000 psi hold pressure while testing N2
		3.) Pressure test N2 lines to 7,000 psi (bleed off in reverse order)
		4.) Pump 40 bbls of Tuned Spacer™ III with surfactant at 15.4 ppg – 5 bpm
		5.) Pump 354 bbls (1483 sks) of TergoVis™ I – 5 bpm
		1.) 15.4 ppg, 1.42 ft3/sk, 7.34 gal/sk
		6.) Pump 89.3 bbls (440 sks) of Conventional Lead Cement – 5 bpm
		1.) 15.4 ppg, 1.14 ft3/sk, 4.89 gal/sk
		2.) Bring on foamer at 80 bbls away – 215 gal needed for job
		3.) Bring on N2 at 85 bbls away – 140,000 scf needed for job plus cooldown
		7.) Pump 125 bbls (438 sks) of foamed lead – 5 bpm
		1.Mixed at 17.5 ppg, 1.43 ft3/sk, 4.99 gal/sk
		2.Foamed to 15.4 ppg, 1.602 ft3/sk
Report Start Date	Report End Date	24hr Activity Summary
4/10/2014	4/11/2014	Finish pumping cement and displacement. Shut well in and hold pressure for 3hours. Clean and rig down HES cementers. Back out of hanger. Pull rotating rubber. Install packoff. Begin ND BOPE. Release rig at 11:00am on 04/10/2014.

**NEWFIELD****Summary Rig Activity****Well Name: Ranch 16-10-3-3-2WH**

Start Time	00:00	End Time	03:00	Comment
				8.) Pump 368 bbls (1445 sks) of foamed lead – 5 bpm 1.) Mixed at 17.5 ppg, 1.43 ft3/sk, 4.99 gal/sk 2.) Foamed to 15.4 ppg, 1.602 ft3/sk 9.) Pump 12.7 bbls (50 sks) of unfoamed tail – 5 bpm 1.) 17.5 ppg, 1.43 ft3/sk, 4.99 gal/sk 10.) Shutdown, wash up, drop plug 11.) Pump 10 bbls of MMCR + Cla-Web + Anhib + Biocide Water – 5 bpm 12.) Pump 421 bbls of Cla-Web + Anhib + Biocide Water – 5 bpm to bump plug 1.) Full returns throughout job 2.) Had full rotation of string up to 210 barrels into displacement. String stalled at 20kft-lbs. 3.) Spacer back at 375 bbls into displacement. 4.) At 385 bbls into displacement nitrogen blew apart the diverter lines to 3-sided peak tanks. Put on gas buster and observed a white vapor coming out of flare stack. 5.) Finished displacement at 3bpm and landed plug 2 bbls early. Final circulating pressure-4200psi. Bump plug 500 psi over FCP. 6.) Held pressure for 5 mins. Observed no flow at shakers. Land casing in wellhead. Shut well in. Bled back 7.5 bbls. Observed a steady stream of water still coming back to pump truck. Pump up pressure to 4600psi and hold for 5 mins. Bled back 6.5 bbls. Still had a steady stream. Pressure up 700psi and hold for 15 mins. Bleed back with no stream.
Start Time	03:00	End Time	06:30	Comment
				Hold pressure on backside. Pressure built to 460psi over three hours. Bleed off pressure and opened annular. No Flow. Rig down HES cementers while WOC.
Start Time	06:30	End Time	10:00	Comment
				(Start) NU Wellhead Equipment. Lay down rotating cement head. Back out of hanger with 44 kft-lbs of torque. Pull rotating rubber. Install pack off. Lay down pack off running tool. Lay over beaver slide.
Start Time	10:00	End Time	11:00	Comment
				(Start) ND BOPE with Eager Beaver. FINAL RIG RELEASE FOR RANCH 16-10-3-3-2WH @ 11:00am on 04/10/2014